4 For 3 Offer

See page 2

serotec

Immunological Excellence

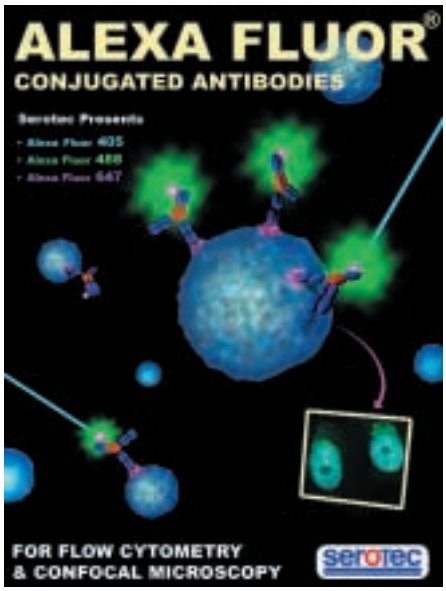
supplement

Alexa Fluor® 405, 488 and 647 dye conjugates now available

(see page 2)

Issue 3, 2004

In this issue...



Alexa Fluor is a registered trademark of Molecular Probes Inc. OR. USA.

Fantastic 4 for 3 offer

Place an order for any 4 Serotec products and the least expensive one's FREE.

This great offer applies to all orders received by any Serotec office or any Serotec distributor throughout October and November. It applies to all our primary and secondary antibodies, isotype controls, accessory reagents and any item available from Serotec. There are over 4000 reagents to choose from so it very easy to take advantage of this offer.

Just mention the offer when ordering!

Alexa Fluor® dye conjugates

We have introduced 3 new conjugates, Alexa Fluor 405, 488 and 647, directly labelled to many of our primary antibody range.

These fluorochromes exhibit brighter and more stable fluorescence than comparable conjugates, and are insensitive to changes in pH over a broad range making them more versatile for multicolour flow cytometry and fluorescence/confocal microscopy.

Serotec's current range includes antibodies to mouse, rat and human CDs and to macrophage markers together with their associated controls. We also offer custom conjugation of clients' antibodies to these dyes.

Alexa Fluor 488 replaces FITC, Alexa Fluor 647 is an alternative to APC and Cy5, whilst Alexa Fluor 405 is the optimal dye for the blue excitation range.

For further information, request our Alexa Fluor brochure online or contact us directly.

Human and Mouse T & B Cell Phenotyping booklets

In response to requests from many scientists, we are pleased to announce the recent publication of two new, handy A6 sized booklets that identify the key antibodies needed for identifying human or mouse T & B cells. Please contact any Serotec office or distributor for your FREE copies.

alamarBlue™

alamarBlue is an indicator dye, formulated to measure quantitatively the proliferation of a variety of human or animal cells, bacteria, mycobacteria and fungi. It consists of an oxidation-reduction (REDOX) indicator that yields a colourimetric change and a fluorescent signal in response to metabolic activity. alamarBlue has many distinct advantages. It is:

- **Simple** - No extraction or centrifugation required
- **Rapid** - Few steps/easily adaptable to Automation
- **Flexible** - Choice of detection methods (fluorescence or colourimetric)
- **Safe** - Non-toxic to cells, user or environment
- **Stable** - Allows continuous monitoring of cells
- **Versatile** - Large range of suitable applications
- **Sensitive**
- **Accurate**
- **Cost Effective** - Available in 25 and 100 ml sizes

Furthermore, alamarBlue has been shown to be useful in the following applications:

- **Cytokine bioassays**
- **Cell proliferation studies**
- *In vitro* **cytotoxicity determinations** (e.g. anticancer drugs)
- **Cell growth monitoring**

Product no.	BUF012A
Quantity	25ml
Price Code	J

Product no.	BUF012B
Quantity	100ml
Price Code	Q

News for Austria and Switzerland…

Serotec antibodies are now available direct in Austria and Switzerland through our Düsseldorf office. All Serotec offices provide the highest levels of customer service, and our team look forward to providing you with excellent technical and sales support.

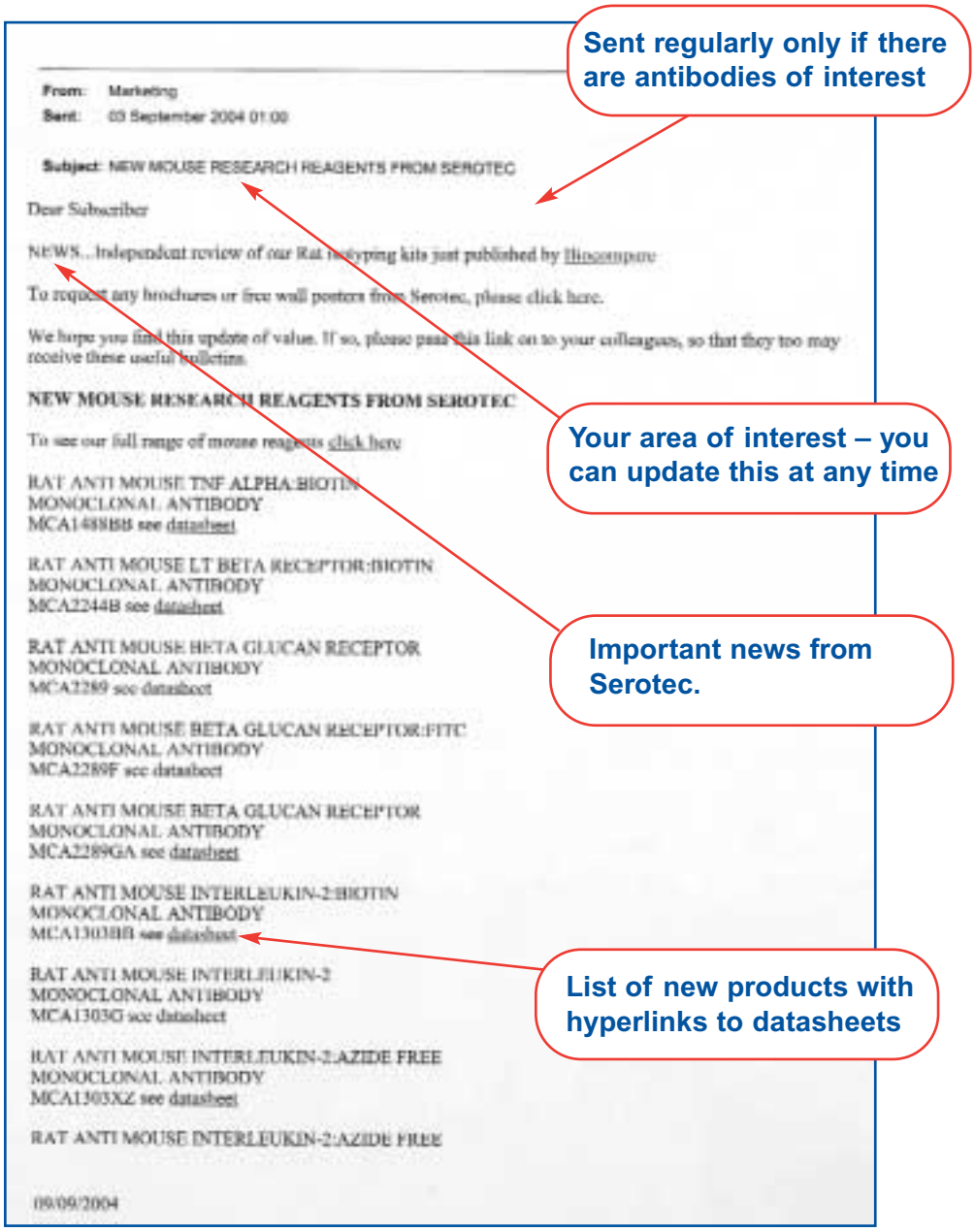
Please call +49 –211-93-503-10, e-mail us at info@serotec.de or visit our German language webpages

www.serotec.com/serotecgmbh/serogmbh.htm

Learn about our new antibodies as they are launched

Each year we introduce about 500 new antibodies and reagents through our ISO9001:2000 quality assurance system.

To make it easy for you to learn about them (or more precisely – the ones most likely to be of interest to you) as quickly as possible, we have an e-mail update service containing only plain-text and important, no-nonsense, hyperlinked information.



From: Marketing
Sent: 03 September 2004 01:00

Subject: NEW MOUSE RESEARCH REAGENTS FROM SEROTEC

Dear Subscriber

NEWS...Independent review of our Rat typing kits just published by Biocompare

To request any brochures or free wall posters from Serotec, please click here.

We hope you find this update of value. If so, please pass this link on to your colleagues, so that they too may receive these useful bulletins.

NEW MOUSE RESEARCH REAGENTS FROM SEROTEC

To see our full range of mouse reagents click here

RAT ANTI MOUSE TNF ALPHA:BIOTIN
MONOCLONAL ANTIBODY
MCA1488BB see datasheet

RAT ANTI MOUSE LT BETA RECEPTOR:BIOTIN
MONOCLONAL ANTIBODY
MCA2244B see datasheet

RAT ANTI MOUSE BETA GLUCAN RECEPTOR
MONOCLONAL ANTIBODY
MCA2289 see datasheet

RAT ANTI MOUSE BETA GLUCAN RECEPTOR:FITC
MONOCLONAL ANTIBODY
MCA2289F see datasheet

RAT ANTI MOUSE BETA GLUCAN RECEPTOR
MONOCLONAL ANTIBODY
MCA2289GA see datasheet

RAT ANTI MOUSE INTERLEUKIN-2:BIOTIN
MONOCLONAL ANTIBODY
MCA1303BB see datasheet

RAT ANTI MOUSE INTERLEUKIN-2
MONOCLONAL ANTIBODY
MCA1303G see datasheet

RAT ANTI MOUSE INTERLEUKIN-2:AZIDE FREE
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MCA1303XZ see datasheet

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09/09/2004

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Your area of interest – you can update this at any time

Important news from Serotec.

List of new products with hyperlinks to datasheets

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Mycoplasma Removal Agent (MRA)

Serotec's new Mycoplasma Removal Agent, MRA, (Product Code BUF035) has been developed for cell culture to combat the widespread problems caused by mycoplasma contamination. It is available in a convenient 5 ml (50 µg/ml) pack.

It is

- Easy to use
- Suitable for preventing contamination
- Effective against many types of mycoplasma including *Mycoplasma orale, M. arginini, M. hyorhinis and Acholeplasma laidlawii*
- Non-toxic and will not interfere with the viability or function of cells in culture when used at the recommended concentrations.

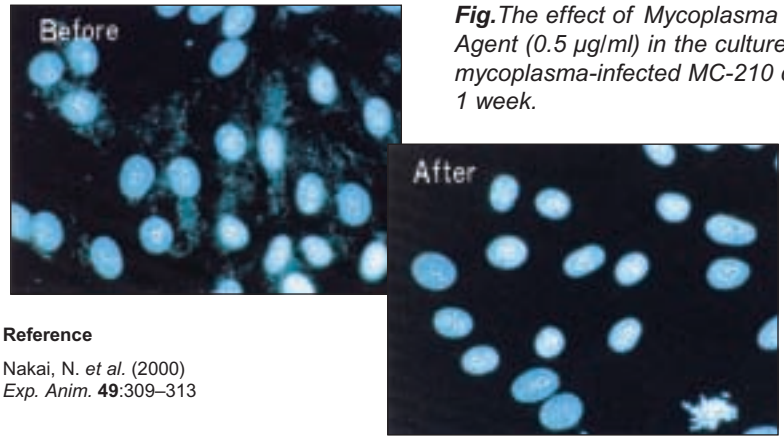


Fig. *The effect of Mycoplasma Removal Agent (0.5 µg/ml) in the culture media of mycoplasma-infected MC-210 cells after 1 week.*

Reference

Nakai, N. *et al.* (2000)
Exp. Anim. **49**:309–313

Efficacy of MRA compared with other anti-mycoplasma agents

	MRA		tiamulin		minocycline	
	MIC*	MMC**	MIC	MMC	MIC	MMC
Mycoplasma orale CH-19299	0.05	0.1	0.0031	3.13	0.05	25.0
Mycoplasma arginini G-230	0.1	0.2	0.0063	12.5	0.2	>100
Mycoplasma hyorhinis BST-7	0.05	0.1	0.031	0.39	0.0031	0.39
Acholeplasma laidlawii PG-8	0.0125	0.025	0.05	>100	0.05	>100
MMC/MIC	2		128 → 2048		512 → 2048	

*MIC = Minimum inhibitory concentration (µg/ml)
**MMC = Minimum mycoplasmacidal concentration (µg/ml)

HLDA8 - Adelaide

Serotec is a sponsor of the 8th HLDA meeting being held on 12-16th December in Adelaide. It will bring together the results of the latest workshops on human lymphocyte markers (also sponsored by Serotec), that will form the basis for new CD designations. We will be exhibiting at this important conference and look forward to meeting you there.

Following many years of commitment to this area, we now have a range of over 900 antibodies recognising human lymphocytes, with many specificities being presented in a wide variety of formats. For a further details, please contact us or visit our website.

Rapid isotyping test strips - accurate results in under 10 minutes

One of the most common tests undertaken in laboratories producing monoclonal antibodies is the determination of antibody isotype. This basic test is of vital importance as the isotype of the antibody has implications for functional activity, purification strategies and long-term stability.

Many current isotyping techniques, such as ELISA assays, take a considerable amount of laboratory time and require the testing of all samples for each isotype, thereby substantially increasing the workload. To address these problems we have easy-to-use, rapid test assays that give accurate results in less than 10 minutes.

Mouse isotyping

Our mouse isotyping kits are based upon well-proven "dip-stick" technology. They contain all the reagents necessary to test antibodies without the need for any instrumentation. The kits have high sensitivity for isotype determination during very early during culture. All classes and sub-classes of mouse immunoglobulin, including kappa and lambda light chains, are discernable.

Description	MOUSE ISOTYPING KIT
Quantity	10 TESTS
Product Code	MMT1
Price Code	N

Rat isotyping

Following the widespread success of our mouse isotyping strips, we are pleased to announce the World's first commercially available rat immunoglobulin isotyping strips. These kits also have a high sensitivity for isotyping during very early during culture and can identify all major classes and sub-classes of rat immunoglobulin.

Description	RAT ISOTYPING KIT
Quantity	10 TESTS
Product Code	RMT1
Price Code	P

These kits are ideal for very quick and accurate results.

CANCER

CD79b is a useful marker for B cell neoplasms

Keywords: chronic lymphocytic leukaemia, B cell receptor complex

CD79b (Ig-β or B29) is a B cell-specific protein, which dimerises with CD79a (Ig-α) to form an important component of the B cell antigen receptor (BCR) complex. The CD79a/b heterodimer is instrumental in B cell signal transduction and is also implicated in allelic exclusion, proliferation, differentiation and apoptosis[1],[2].

Description	MOUSE ANTI-HUMAN CD79b (AT107-2)
Quantity	0.2 mg
Product Code	MCA2209
Applications	E, F*, IP, WB

The BCR is responsible for antigen capture[3] and abnormalities in the complex have been linked to neoplastic diseases, in particular, B cell chronic lymphocytic leukaemia (B-CLL, see page 7). In B-CLL tumours, there is a low expression of CD79b resulting in the functional deficiency of the CD79a/b heterodimer and hence signalling.

Description	MOUSE ANTI-HUMAN CD79a (ZL7-4)
Quantity	0.2 mg
Product Code	MCA1298
Applications	C, E, F, IP, P*

As a consequence, antibodies to CD79b have been used to distinguish B-CLL from other B cell neoplasms since most of the former type is CD79b negative whilst the latter are generally CD79b positive. CD79a is also useful for differential diagnosis[4]. Serotec offers a clone AT107-2 (MCA2209) that recognises an intracellular region of human CD79b and which has been demonstrated to work on the following applications: flow cytometry, ELISA, immunoprecipitation and Western blotting.

References

1. Hsueh, R.C. & Scheuermann, R.H. (2000) *Adv Immunol.* **75:** 283-316

2. Tseng, J. *et al.* (1997) *Blood* **89:** 1513-1520

3. Clark, M.R. *et al.* (2003) *Ann N Y Acad Sci.* **987:** 26-37

4. Chu, P.G. & Arber, D.A. (2001) *Appl Immunohistochem Mol Morphol.* **9:** 97-106 REVIEW

CANCER

CAMPATH-1 antibodies are used to treat chronic lymphocytic leukaemia

Keywords: CD52, B lymphocytes, alemtuzumab, immunotherapy

Chronic lymphocytic leukaemia (CLL) is a form of cancer that affects white blood cells, particularly B lymphocytes (B-CLL). The disease causes B cells to proliferate uncontrollably in the bone marrow where they eventually outnumber normal healthy blood cells. From here the malignant cells can enter the bloodstream and infiltrate many of the body's vital organs and functional systems.

Description	RAT ANTI-HUMAN CD52 (YTH34.5)
Quantity	0.2 mg
Product Code	MCA1642
Applications	C, CT, E, F, IP, P*, RE, WB

CD52 is a glycosylated 21-28 kDa antigen that is expressed abundantly on the cell surface of most normal and malignant lymphocytes and monocytes[1] although its precise role remains undefined. It is attached to the cell membrane via a glycosylphosphatidylinositol (GPI) anchor and like most glycoproteins possessing this post-translational modification, can be activated by antibody binding[2].

The CAMPATH-1 family of antibodies specifically recognises CD52 and has been prescribed for therapy of B-CLL since 2001 under the trademarks Campath® and Mabcampath®. The drug, generically known as alemtuzumab, works by inducing cell lysis after binding to CD52, thus facilitating the removal of cancerous cells.

Description	MSE ANTI-HUMAN CD52 (HI186)
Quantity	0.2 mg
Product Code	MCA2188
Applications	F

Serotec offers several antibodies that are specific for the CAMPATH-1 antigen. The clone YTH34.5, (MCA1642) is the original rat version of the therapeutic humanised CAMPATH-1 and, therefore, recognises the same epitope as the therapeutic antibody. However, clone HI186 (MCA2188), which can be used in flow cytometry, binds to a different epitope and is not inhibited by YTH34.5. This makes it ideal for the detection of CD52 in samples from patients treated with alemtuzumab.

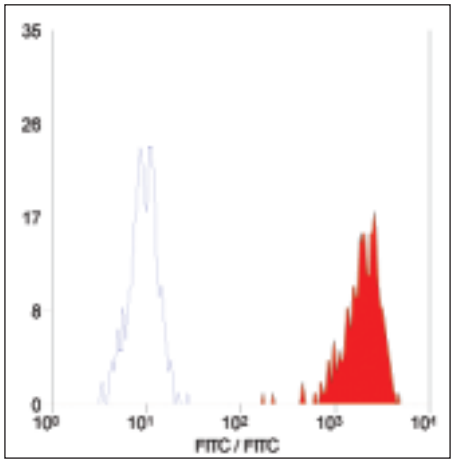


Fig. 1 *Staining of human peripheral blood monocytes (in red) with MOUSE ANTI-HUMAN CD52 (MCA2188) using flow cytometry. Negative control in blue.*

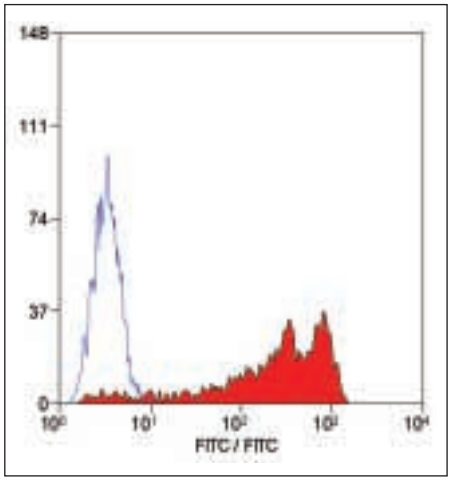


Fig. 2 *Staining of human peripheral blood lymphocytes (in red) with RAT ANTI-HUMAN CD52:FITC (MCA1642F) using flow cytometry. Negative control in blue.*

References

1. Hale, G. *et al* (1990) *Tissue Antigens* **35**: 1-10

2. Rowan, W.C. *et al* (1995) *Int. Immunol.* **7**: 69-77

CANCER

Oestrogen receptors are targets for breast cancer management

Keywords: Oestrogen, ERα, ERβ, transcription factors

Breast cancer is the most common form of cancer to affect women. Its chance of occurrence increases with age and the lifetime risk has been estimated at 1 for every 9 women[1]. It can also affect men, although the number of incidences is very small in comparison. The underlying causes for the development and progression of this disease varies, but the over-activity of oestrogen receptors (ERs) is linked.

Oestrogen receptors are ligand-stimulated transcription factors, however, to date, only a few downstream target genes have been identified e.g. the progesterone receptor[2] and pS2[3]. Structurally they are similar to the members of the nuclear receptor family and share the six characteristic domains (A-F)[4]. Typically ERs are only present in 6-10% of healthy breast epithelial cells and function in regulating normal growth, differentiation and homeostasis[5]. But two-thirds of primary breast cancers are "ER-positive" and 60-70% of these respond to treatments that deprive cancer cells of the oestrogen they need to grow and multiply, thereby controlling the tumour[6].

Description	MSE ANTI-HUMAN ER ALPHA (6F11)
Quantity	1.0 ml
Product Code	MCA1799
Applications	C*, P*, WB

Oestrogen antagonists such as tamoxifen have been the mainstay of clinical therapy for the past 20 years. These drugs are selective oestrogen receptor modulators (SERMs) and compete with the natural hormone for ER binding sites. Unfortunately, tumours seem to become tamoxifen-resistant after approximately 5 years and so alternative therapies are being actively sought and clinically tested. One example is the use of oestrogen receptor downregulators (ERDs) such as fulvestrant, which attach to ERs and signal their destruction thereby reducing the number of receptors available for the hormone to activate (see also the aromatase inhibitor article on page 9).

Description	MOUSE ANTI-HUMAN ER BETA 1 (PPG5/10)
Quantity	2.0 ml
Product Code	MCA1974
Applications	C, P*

The first oestrogen receptor to be discovered (ERα) was finally cloned in 1986[5]. Its gene is localised to the long arm of human chromosome 6 and encodes a protein of 66 kDa[7]. Serotec supplies an antibody clone 6F11 (MCA1799), which recognises this protein (human form) on Western blots and in immunohistology sections.

Originally this receptor together with its ligand, oestradiol (the most potent oestrogen), was thought to be essential for life. However, in 1994 a patient lacking functional ERα was identified. Although he suffered from severe osteoporosis and reduced fertility he lived, proving that mutations of ER in humans is not lethal.

Description	MOUSE ANTI-HUMAN ER BETA 2 (57/3)
Quantity	1.0 ml
Product no.	MCA2279S
Applications	P*, WB

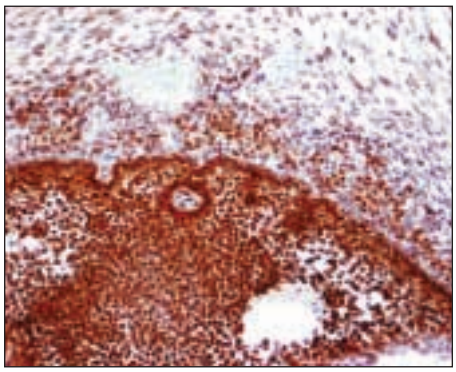


Fig 1. *Micrograph of human ovary immunostained using MOUSE ANTI-HUMAN OESTROGEN RECEPTOR BETA 1 (MCA1974).*

Later, a second subtype of oestrogen receptor was found, cloned and named ERβ[8]. This 59 kDa receptor shares significant amino acid identity with ERα, particularly in the DNA-binding and C-terminal ligand binding domains (domains A and F, respectively), see[4, 9], and is also activated by oestradiol.

However, it is mapped to human chromosome 14 suggesting that it may control genes quite distinct from ERα. Indeed, the expression of ERβ isoforms differs from those of ERα in certain cells and tissues[11]. More interestingly, immunohistochemistry has shown that the ERβ isoforms are differentially expressed in breast tumours and in healthy components of breast tissue[12]. This may be exploited in the future to design ERβ isoform-specific therapies that will only target cancerous tissues. Serotec provides two antibodies that recognise the human ERβ1 (clone PPG5/10) and ERβ2 (clone 57/3) isoforms without cross-reactivity (MCA1974 and MCA2279S, respectively).

References

1. Current statistics from Cancer Research UK
2. Kastner, P. *et al.* (1990) *EMBO J* **9:** 1603-14
3. Rio, M.C. *et al.* (1987) *PNAS* **84:** 9243-47
4. Enmark, E. and Gustafsson, J. (1999) *J Internal Medicine* **246:** 133-38 REVIEW
5. Green, S. *et al.* (1986) *J. Steroid Biochemistry* **24:** 77-83
6. Jacquemier, J.D. *et al.* (1990) *Breast Cancer Res Treatment* **15:** 109-17
7. Ponglikitmongkol, M. *et al.* (1988) *EMBO J* **7:** 3385-88
8. Kuiper, G.G. *et al.* (1996) *PNAS* **93:** 5925-30
9. Hanstein, B. et al. (2004) *Eur J Endocrinol* **150:** 243-55 REVIEW
10. Henke, B.R. *et al.* (2002) *J. Medicinal Chem* **45:** 5492-5505
11. Tong, D. *et al.* (2002) *Breast Cancer Res Treat.* **71:** 249-55
12. Chi, A. *et al.* (2003) *Anticancer Research* **23:** 211-16

Aromatase inhibitors reduce oestrogen production

Keywords: cytochrome P450 aromatase

In June 2004, an international clinical study involving 5,200 women presented at the American Society of Clinical Oncology Annual Meeting claimed that taking the drug letrozole after a course of tamoxifen reduced breast cancer death rates by 39%. It also provided evidence that letrozole, an aromatase inhibitor, decreased the risk of cancer spreading to another region of the body by 40%. These results together with other clinical trials have raised the profile of aromatase inhibitors in the treatment of breast cancer. Letrozole is now widely used to treat women who experience failure with tamoxifen and may soon replace the latter as initial therapy.

Aromatase inhibitors prevent the production of oestrogen through inactivation of the aromatase enzyme, which is necessary for the final step of the hormone's biosynthesis. These agents are only effective in post-menopausal women where oestrogen is no longer produced by the ovaries, but is produced from androgen. Their effect is to decrease oestrogen levels in the bloodstream by 1-10% of pre-treatment levels and thereby reduce the amount reaching oestrogen receptors in the tumour.

There are two categories of aromatase inhibitor used in treatment today, irreversible steroidal (e.g. exemestane) and reversible nonsteroidal (e.g. anastrozole and letrozole). These are third generation drugs, which are potent and selective for aromatase. However, they inhibit the enzyme by different mechanisms of action.

Description	MSE ANTI-HUMAN CYTOCHROME P450 AROMATASE (H4)
Quantity	2.0 ml
Product Code	MCA2077
Applications	P, WB

Steroidal drugs have a structure like androgen and compete with the natural hormone for the catalytic site of aromatase, binding irreversibly. Only newly synthesised enzyme can continue the oestrogen production. In contrast, non-steroidal drugs such as letrozole reversibly bind to the cytochrome P450 moiety of the enzyme. Their effectiveness is dependent on their continued presence in the body. Cytochrome P450s are an important family of haem-containing mono-oxygenases that are responsible for most phase I drug metabolism (conversion of molecules into polar metabolites).

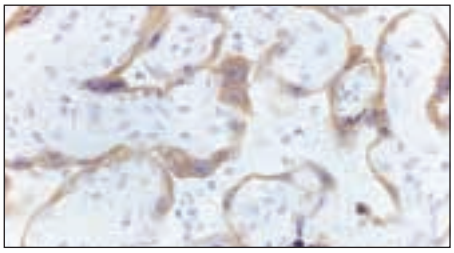


Fig 1. *Micrograph of human placenta immunostained using MOUSE ANTI-HUMAN CYTOCHROME P450 AROMATASE (MCA2077).*

Over 1200 animal P450 sequences have been identified to date. Serotec's anti-human cytochrome P450 aromatase antibody MCA2077 (clone H4) recognises a highly conserved epitope within the P450 moiety and has been successfully tested on Western blots and paraffin sections.

Further Reading

Campos, S.M. (2004) *The Oncologist* **9:** 126-36

Clemons, M. *et al.* (2004) *Cancer Treat Rev* **30:** 325-32

Pasqualini, J.R. (2004) *Biochim Biophys Acta* **1654:** 123-43

Sainsbury, R. (2004) *Br J Cancer* **90:** 1733-9

IMMUNITY

Isolate viable dendritic cells quickly and easily

Keywords: dendritic cell exclusion cocktail, human CD205 antibody

Dendritic cells (DCs) are a vital component of the immune system. As antigen presenting cells (APCs) they collect foreign material, process it and pass it to naive T cells to initiate immune responses. Purifying dendritic cells from peripheral blood using conventional centrifugation and magnetic microbead sorting techniques can be a laborious task, and more importantly, may alter or damage the very cells you wish to obtain. Serotec has developed a new way of selecting for DCs via flow cytometry resulting in a preparation of dendritic cells that have not been modified or activated by physical separation.

Description	DENDRITIC CELL EXCLUSION C/TAIL:RPE-CY5
Quantity	50 TESTS
Product Code	MCA2248C
Applications	F

Serotec's unique dendritic cell exclusion cocktail (Product Code MCA2248C) is a mixture of RPE-Cy5 conjugated antibodies specific for CD3/CD14/CD16/CD19/CD34 and is used in conjunction with anti-HLA-DR:RPE (Product Code MCA1879PE). Peripheral blood dendritic cells are "cocktail" negative/HLA-DR positive and are easily identified by suitable gating strategies using only two colours. This allows simultaneous analysis of other dendritic cell surface markers using multi-colour flow cytometry. There is also the potential to collect these cells by flow sorting for further studies.

This cocktail may be used with other Serotec dendritic cell-specific markers e.g. CD205. MCA2258 recognises human CD205, a 205 kDa cell surface glycoprotein that is also known as DEC-205. CD205 is a multi-lectin receptor, which, in humans, is predominantly expressed by dendritic cells. Clone MG38 stains mature monocytes-derived dendritic cells and weakly labels some peripheral blood mononuclear cells[1]. Clone MG38 also stains cortical epithelium in the thymus.

Reference

1. Guo *et al.* (2000)
Hum Immunol **61:** 729-738

Description	MSE ANTI-HUM HLA CLASS II DR:RPE (HI-39)
Quantity	100 TESTS
Product Code	MCA1879PE
Applications	F

Description	MOUSE ANTI-HUMAN CD205 (MG38)
Quantity	0.2 mg
Product Code	MCA2258
Applications	C, F*, IP

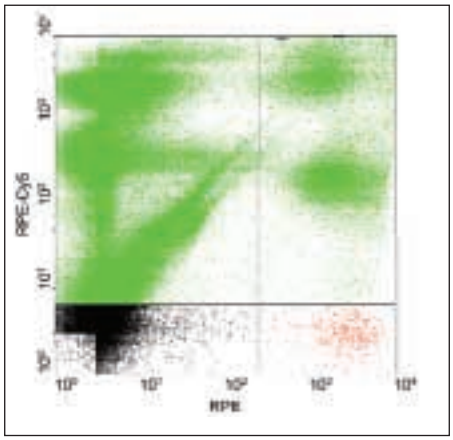


Fig. 1 *Human peripheral blood leucocytes stained with MCA2248C and MOUSE ANTI-HUMAN HLA-DR:RPE (MCA1879PE). Dendritic cells are HLA-DR +ve /MCA2248C -ve, and may be visualised as the red population in the lower right corner of the dot-plot.*

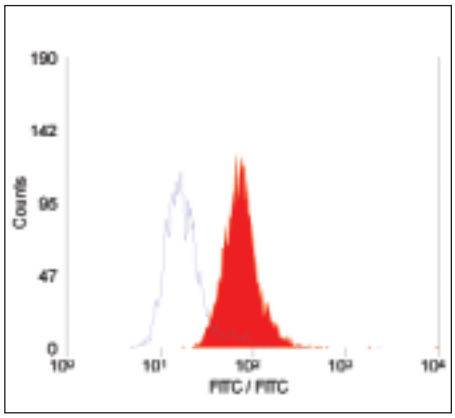


Fig. 2 *Staining of the human KM-H2 cell line (in red) with MOUSE ANTI-HUMAN CD205 (MCA2258), visualised with F(ab')$_2$ rabbit anti-mouse IgG:FITC (STAR9B). Negative control in blue.*

IMMUNITY

Dectin-1 – target for future β-glucan therapeutics?

Keywords: β-glucan receptor, phagocytosis, macrophages, toll-like receptors

Innate immunity is the body's use of antigen-non-specific defence mechanisms to prevent infection after exposure to foreign particles. Unlike adaptive immunity, it works by identifying a few highly conserved structural motifs present in various micro-organisms but not in human cells. Structures such as these are classed as pathogen-associated molecular patterns (PAMPs). To recognise them, our body's defence cells have on their surface pattern-recognition receptors (PRRs).

Zymosan is an interesting PAMP found in fungal cell walls, which is rich in the polysaccharides, β-glucan and mannan. In vivo, the addition of zymosan or purified β-(1.3-1.6)-glucans can have anti-infective and anti-carcinogenic effects on the immune system that arise from their ability to activate leucocytes. This has made the future exploitation of β-glucan-based therapeutics an interesting prospect.

Description	RAT ANTI-MSE β-GLUCAN RECEPTOR (2A11)
Quantity	0.25 mg
Product Code	MCA2289
Applications	F, IP

Dectin-1 (β-glucan receptor) is a major PRR on macrophages for the non-opsonic recognition of β-glucans. The receptor is also expressed on monocytes, neutrophils and subsets of dendritic cells. Dectin-1 is a type II membrane protein with a single lectin-like carbohydrate recognition domain and a non-classical immunoreceptor tyrosine based activation motif (ITAM) in its cytoplasmic tail. The ITAM-like motif becomes tyrosine phosphorylated upon ligand binding and mediates the phagocytosis of fungal particles and the production of pro-inflammatory cytokines like tumour necrosis factor (TNFα) in collaboration with the toll-like receptors (TLRs).

Much of the research done to elucidate the functional role of Dectin-1 in immunity has arisen through the use of a monoclonal antibody (clone 2A11). This mAb has been successfully tested in detecting the expression of Dectin-1 on the surface of cells by flow cytometry and in immunoprecipitation studies.

Interestingly, the antibody can also competitively inhibit unopsinised zymosan binding to macrophages to an extent comparable to the exogenous β-glucans, glucan phosphate and laminarin. In fact, the two soluble β-glucans can themselves block 2A11 binding to Dectin-1 suggesting that all three recognise the same epitope on the PRR. Serotec has exclusive rights to this clone (MCA2289) and will also produce directly conjugated formats on request. The FITC-conjugated version (MCA2289F) is already available see figure.

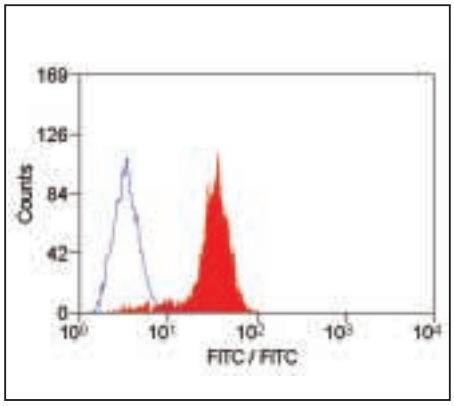


Fig. 1 *Staining of mouse peripheral blood granulocytes (in red) with RAT ANTI-MOUSE BETA-GLUCAN RECEPTOR (MCA2289F) using flow cytometry. Negative control shown in blue outline*

Further reading

Brown, G.D. *et al* (2002)
J. Exp. Med. **196:** 407-412

Brown, G.D. *et al.* (2003)
J. Exp. Med. **197:** 1119-1124

Taylor, P.R. *et al.* (2002)
J. Immunol. **169:** 3876-3882

INFLAMMATION

Lymphotoxin-β receptor – a communications marker for activated lymphocytes

Keywords: TNFR superfamily, embryogenesis

Lymphotoxin-β receptor (LTβR) is a member of the tumour necrosis factor receptor (TNFR) superfamily. It is a type I integral membrane glycoprotein, which is involved in diverse biological effects e.g. organisation of lymphoid tissues, lymph nodes and Peyer's patches during embryogenesis, and the formation of secondary lymphoid structures in adults at sites of inflammation. LTβR is primarily expressed on the surface of stromal cells and fibroblasts and at low levels on some myeloid cell lines. Rather interestingly, its two known functional ligands, lymphotoxin (LTα1/β2) and LIGHT are expressed on activated lymphocytes.

Description	RAT ANTI-MOUSE LTBR (5G11b)
Quantity	0.25 mg
Product Code	MCA2244
Applications	F

It is therefore possible that this arrangement may represent a method by which activated lymphocytes can communicate with the neighbouring receptor-positive cells. Indeed, recently, the bone marrow derived mast cells that express LTβR were shown to release cytokines and chemokines via the LTβR pathway upon stimulation with activated T cells[1]. Serotec is offering the clone 5G11b used in these studies to its customers (MCA2244) in various formats. The rat anti-LTβR antibody specifically recognises surface expressed LTβR using flow cytometry and is reported to be agonistic with respect to NFκB activation, MIP-2 induction and IL-6 release[2].

References

1. Stopfer, P. *et al.* (2004) *J. Immunol.* **172:** 7459-65

2. Hehlgans, T. *et al.* (2003). *Eur. Cytokine Netw.* **14:** 103-107

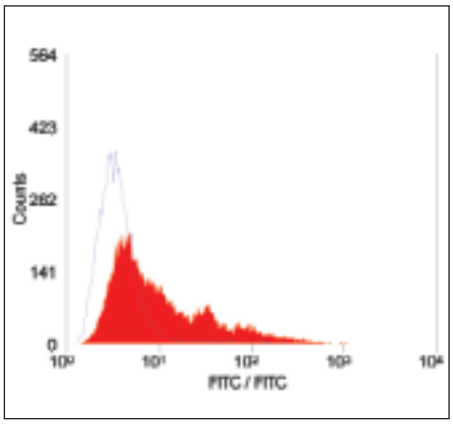


Fig. 1 *Staining of the total mouse bone marrow cells (in red) with RAT ANTI-MOUSE LYMPHOTOXIN BETA RECEPTOR:FITC (MCA2244F) using flow cytometry. Negative staining in blue*

MEMBRANE TRANSPORTERS

Antibodies for PG/LC Transporter

Keywords: calcium homeostasis, pituitary, kidney, placenta

A novel transporter has recently been described that is expressed in cells of human pituitary, which secretes growth hormone and/or prolactin[1]. Hence it has been named the Pituitary Growth/Lactation Coupled (PG/LC) Transporter. It is expressed in cells and tissues involved in calcium homeostatic mechanisms in adult (kidney, placenta) and in particular, developing foetal tissues.

Transmembrane transporters that are found expressed in specific cell types in certain tissues accumulate substrates with high affinity and display a narrow range of metabolite selection. Many of these transporters are members of the Major Facilitator Superfamily.

Description	RABBIT ANTI-HUMAN PG/LC TRANSPORTER
Quantity	0.1 mg
Product code	AHP834
Applications	P*

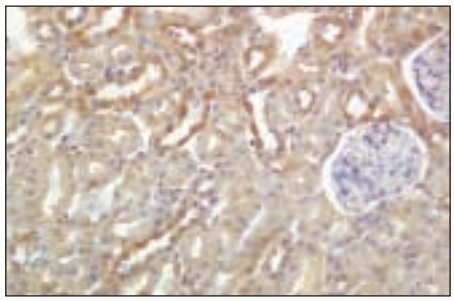
The (PG/LC) transporter is also thought to function as a calcium-chelate transporter (CCT) that in some physiological contexts may play an important coupling role in calcium homeostatic mechanisms for instance in the pituitary and kidney. The transporter is highly conserved throughout the mammals investigated so far and may be conserved throughout vertebrates[1], stressing the fundamental nature of the function of the transporter.

Description	RABBIT ANTI-RAT PG/LC TRANSPORTER
Quantity	0.1 mg
Product code	AHP835
Applications	P*, WB

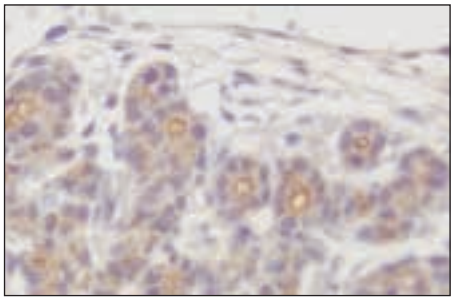
Research into adult cells that express the PG/LC transporter has not been widely reported. Polyclonal antibodies (rabbit) that can distinguish between peptides that represent epitope1[1] of human (Product Code AHP834) and rodent (Product Code AHP835) but are absent from the human C10 protein (receptor for the Feline Leukaemia Virus, subtype C) are available for research purposes.

Description	MSE ANTI-HUM/RAT PG/LC TRANSPORTER (33-01)
Quantity	0.1 mg
Product code	MCA2322
Applications	P*

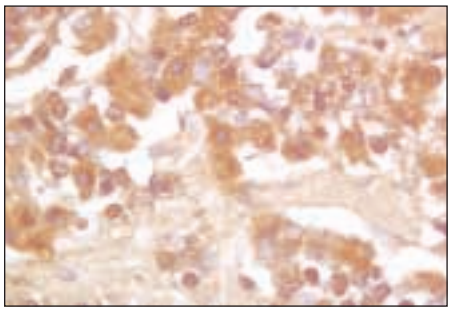
Furthermore a mouse monoclonal antibody (clone 33-01) is also available (Product Code MCA2322) that was raised against epitope 2[1]. These antibodies have high titres as determined by an ELISA test against the peptides. The rodent specific polyclonal antibody (Product Code AHP835) also detects a single band of protein derived from rodent kidney on Western blots. The antibodies have all been successfully tested in immunological experiments on paraffin sections of rodent tissues fixed in 4% paraformaldehyde[1].



a



b



c

Fig. 1 *Immunohistochemical staining of PG/LC transporter protein in various tissues.*

a, *rat kidney using MOUSE ANTI-RAT (MCA2322).*

b, *rat foetal thyroid using RABBIT ANTI-RAT (AHP835)*

c, *human pituitary using RABBIT ANTI-HUMAN (AHP834)*

Reference

1 Brasier, G. *et al.* (2004) *Expt Cell Res* **293:** 31-42

NEW reagents

New reagents introduced since publishing the 2004 Product Guide

Human Reagents

Specificity	Target Species	Host	Clone	Isotype	Format	Quantity	Applications	Product Code	Price Code
ACTIN (MUSCLE)	HUM	MOUSE	HHF35	IgG1	PURIFIED	0.1ml	C,P	MCA1906T	E
BLTR	HUM	MOUSE	202/7B1	IgG2a	ALEXA FLUOR® 647	100 TESTS	F	MCA2108A647	P
CD1a	HUM	MOUSE	NA1/34	IgG2a	ALEXA FLUOR® 488	100 TESTS	F	MCA80A488	P
CD1a	HUM	MOUSE	NA1/34	IgG2a	ALEXA FLUOR® 647	100 TESTS	F	MCA80A647	P
CD2	HUM	MOUSE	LT2	IgG2b	ALEXA FLUOR® 647	100 TESTS	F	MCA1194A647	P
CD3	HUM	MOUSE	UCHT1	IgG1	ALEXA FLUOR® 405	100 TESTS	F	MCA463A405	T
CD3	HUM	MOUSE	UCHT1	IgG1	ALEXA FLUOR® 488	100 TESTS	F	MCA463A488	P
CD3	HUM	MOUSE	UCHT1	IgG1	ALEXA FLUOR® 647	100 TESTS	F	MCA463A647	P
CD3	HUM	MOUSE	UCHT1	IgG1	LOW ENDOTOXIN	0.5mg	C,F	MCA463EL	X
CD4	HUM	MOUSE	RPA-T4	IgG1	ALEXA FLUOR® 405	100 TESTS	F	MCA1267A405	T
CD4	HUM	MOUSE	RPA-T4	IgG1	ALEXA FLUOR® 488	100 TESTS	F	MCA1267A488	P
CD4	HUM	MOUSE	RPA-T4	IgG1	ALEXA FLUOR® 647	100 TESTS	F	MCA1267A647	P
CD4	HUM	MOUSE	RPA-T4	IgG1	APC	100 TESTS	F	MCA1267APC	T
CD4	HUM	RAT	YNB46.1.8	IgG1	PURIFIED	0.2mg	F	MCA484G	Q
CD5	HUM	MOUSE	MF7-14.5	IgG2a	APC	100 TESTS	F	MCA1341APC	T
CD8	HUM	MOUSE	LT8	IgG1	ALEXA FLUOR® 405	100 TESTS	F	MCA1226A405	T
CD8	HUM	MOUSE	LT8	IgG1	ALEXA FLUOR® 488	100 TESTS	F	MCA1226A488	P
CD8	HUM	MOUSE	LT8	IgG1	ALEXA FLUOR® 647	100 TESTS	F	MCA1226A647	P
CD9	HUM	MOUSE	72F6	IgG1	S/N	0.1ml	C,P*	MCA1805T	E
CD10	HUM	MOUSE	SN5c	IgG1	ALEXA FLUOR® 488	100 TESTS	F	MCA1556A488	P
CD10	HUM	MOUSE	SN5c	IgG1	APC	100 TESTS	F	MCA1556APC	T
CD10	HUM	MOUSE	SN5c	IgG1	PURIFIED	0.1mg	C,F,IP,WB	MCA1556GA	J
CD11a	HUM	MOUSE	38	IgG2a	ALEXA FLUOR® 647	100 TESTS	F	MCA1848A647	P
CD11b	HUM	MOUSE	ICRF44	IgG1	ALEXA FLUOR® 647	100 TESTS	F	MCA551A647	P
CD11c	HUM	MOUSE	BU15	IgG1	ALEXA FLUOR® 488	100 TESTS	F	MCA2087A488	P
CD11c	HUM	MOUSE	BU15	IgG1	ALEXA FLUOR® 647	100 TESTS	F	MCA2087A647	P
CD13	HUM	MOUSE	WM15	IgG1	ALEXA FLUOR® 488	100 TESTS	F	MCA1270A488	P
CD13	HUM	MOUSE	WM15	IgG1	ALEXA FLUOR® 647	100 TESTS	F	MCA1270A647	P
CD13	HUM	MOUSE	WM15	IgG1	APC	100 TESTS	F	MCA1270APC	T
CD14	HUM	MOUSE	UCHM1	IgG2a	ALEXA FLUOR® 647	100 TESTS	F	MCA596A647	P
CD15	HUM	MOUSE	TG-1	IgM	ALEXA FLUOR® 647	100 TESTS	F	MCA1762A647	P
CD16	HUM	MOUSE	LNK16	IgG1	ALEXA FLUOR® 647	100 TESTS	F	MCA1193A647	P
CD18	HUM	RAT	YFC118.3	IgG2b	ALEXA FLUOR® 647	100 TESTS	F	MCA503A647	P
CD19	HUM	MOUSE	LT19	IgG1	ALEXA FLUOR® 488	100 TESTS	F	MCA1940A488	P
CD19	HUM	MOUSE	LT19	IgG1	ALEXA FLUOR® 647	100 TESTS	F	MCA1940A647	P
CD20	HUM	MOUSE	2H7	IgG2b	APC	100 TESTS	F	MCA1710APC	T
CD23	HUM	MOUSE	D3.6	IgG2a	ALEXA FLUOR® 647	100 TESTS	F	MCA1931A647	P
CD25	HUM	MOUSE	MEM-181	IgG1	RPE	100 TESTS	F	MCA2127PE	S
CD27	HUM	MOUSE	LT27	IgG2a	ALEXA FLUOR® 647	100 TESTS	F	MCA755A647	P
CD28	HUM	RAT	YTH913.12	IgG2b	ALEXA FLUOR® 647	100 TESTS	F	MCA709A647	P
CD28	HUM	RAT	YTH913.12	IgG2b	LOW ENDOTOXIN	0.5mg	C,F,FN	MCA709EL	X
CD30	HUM	MOUSE	15B3	IgG1	S/N	0.2ml	C,P*	MCA2103T	E
CD32	HUM	MOUSE	AT10	IgG1	ALEXA FLUOR® 647	100 TESTS	F	MCA1075A647	P
CD33	HUM	MOUSE	WM53	IgG1	ALEXA FLUOR® 488	100 TESTS	F	MCA1271A488	P
CD33	HUM	MOUSE	WM53	IgG1	ALEXA FLUOR® 647	100 TESTS	F	MCA1271A647	P
CD33	HUM	MOUSE	WM53	IgG1	APC	100 TESTS	F	MCA1271APC	T
CD37	HUM	MOUSE	WR17	IgG2a	S/N	2.0ml	C,F	MCA483S	Q
CD38	HUM	MOUSE	AT13/5	IgG1	ALEXA FLUOR® 488	100 TESTS	F	MCA1019A488	P
CD38	HUM	MOUSE	AT13/5	IgG1	ALEXA FLUOR® 647	100 TESTS	F	MCA1019A647	P
CD40	HUM	MOUSE	LOB7/6	IgG2a	ALEXA FLUOR® 647	100 TESTS	F	MCA1590A647	P
CD41	HUM	MOUSE	PM6/248	IgG1	ALEXA FLUOR® 647	100 TESTS	F	MCA467A647	P
CD42a	HUM	MOUSE	GRP-P	IgG1	ALEXA FLUOR® 647	100 TESTS	F	MCA1227A647	P

Human Reagents continued

Specificity	Target Species	Host	Clone	Isotype	Format	Quantity	Applications	Product Code	Price Code
CD44	HUM	MOUSE	F10-44-2	IgG2a	ALEXA FLUOR® 647	100 TESTS	F	MCA89A647	P
CD45	HUM	MOUSE	F10-89-4	IgG2a	ALEXA FLUOR® 488	100 TESTS	F	MCA87A488	P
CD45	HUM	MOUSE	F10-89-4	IgG2a	ALEXA FLUOR® 647	100 TESTS	F	MCA87A647	P
CD45	HUM	MOUSE	F10-89-4	IgG2a	APC	100 TESTS	F	MCA87APC	T
CD45RA	HUM	MOUSE	F8-11-13	IgG1	ALEXA FLUOR® 647	100 TESTS	F	MCA88A647	P
CD49f	HUM	RAT	NKI-GoH3	IgG2a	ALEXA FLUOR® 647	100 TESTS	F	MCA699A647	P
CD50	HUM	MOUSE	ICAM3.3 (CH3.3)	IgG1	ALEXA FLUOR® 647	100 TESTS	F	MCA1485A647	P
CD50	HUM	MOUSE	ICAM3.3 (CH3.3)	IgG1	RPE	100 TESTS	F	MCA1485PE	S
CD52	HUM	MOUSE	HI186	IgG2b	RPE	100 TESTS	F	MCA2188PE	S
CD52	HUM	RAT	YTH66.9HL	IgM	PURIFIED	1.0mg	C,CT,F,WB	MCA349	D1
CD52	HUM	RAT	YTH66.9HL	IgM	PURIFIED	0.2mg	C,CT,F,WB	MCA349R	N
CD59	HUM	MOUSE	MEM-43	IgG2a	ALEXA FLUOR® 647	100 TESTS	F	MCA1054A647	P
CD61	HUM	MOUSE	PM6/13	IgG1	ALEXA FLUOR® 647	100 TESTS	F	MCA728A647	P
CD71†	HUM	MOUSE	DF1513	IgG1	ALEXA FLUOR® 647	100 TESTS	F	MCA1148A647	P
CD79 BETA	HUM	MOUSE	AT105-1	IgG1	PURIFIED	100 TESTS	F	MCA2208PE	Q
CD79 BETA	HUM	MOUSE	AT107-2	IgG1	FITC	0.1mg	F*	MCA2209F	P
CD79a	HUM	MOUSE	ZL7-4	IgG1	ALEXA FLUOR® 488	100 TESTS	F	MCA1298A488	Q
CD81	HUM	MOUSE	1D6	IgG1	AZIDE FREE	1.0mg	F,P,IP,FN,WB	MCA1847XZ	Z
CD83	HUM	MOUSE	HB15e	IgG1	ALEXA FLUOR® 488	100 TESTS	F	MCA1582A488	P
CD83	HUM	MOUSE	HB15e	IgG1	ALEXA FLUOR® 647	100 TESTS	F	MCA1582A647	P
CD83	HUM	MOUSE	HB15e	IgG1	PURIFIED	20ug	C,F,P*	MCA1582T	C
CD94	HUM	MOUSE	DX22	IgG1	PURIFIED	0.2mg	F	MCA2254	Q
CD94	HUM	MOUSE	DX22	IgG1	BIOTIN	0.1mg	F	MCA2254B	N
CD94	HUM	MOUSE	DX22	IgG1	FITC	0.1mg	F	MCA2254F	N
CD94	HUM	MOUSE	DX22	IgG1	PURIFIED	0.1mg	F	MCA2254GA	J
CD94	HUM	MOUSE	DX22	IgG1	RPE	100 TESTS	F	MCA2254PE	S
CD94	HUM	MOUSE	DX22	IgG1	AZIDE FREE	1.0mg	F,FN	MCA2254XZ	Z
CD101	HUM	MOUSE	BB27	IgG1	PURIFIED	0.2mg	C,F,IP	MCA2236	Q
CD101	HUM	MOUSE	BB27	IgG1	FITC	0.1mg	F	MCA2236F	N
CD101	HUM	MOUSE	BB27	IgG1	RPE	100 TESTS	C,F,IP	MCA2236PE	S
CD101	HUM	MOUSE	BB27	IgG1	AZIDE FREE	1.0mg	C,F,FN,IP	MCA2236XZ	Z
CD105	HUM	MOUSE	SN6	IgG1	ALEXA FLUOR® 488	100 TESTS	F	MCA1557A488	P
CD105	HUM	MOUSE	SN6	IgG1	ALEXA FLUOR® 647	100 TESTS	F	MCA1557A647	P
CD106	HUM	MOUSE	STA	IgG1	PURIFIED	0.2mg	F,IP	MCA2237	Q
CD106	HUM	MOUSE	STA	IgG1	RPE	100 TESTS	F	MCA2237PE	S
CD106	HUM	MOUSE	STA	IgG1	AZIDE FREE	1.0mg	F,IP	MCA2237XZ	Z
CD119	HUM	MOUSE	BB1E2	IgG2a	ALEXA FLUOR® 488	100 TESTS	F	MCA1450A488	Q
CD119	HUM	MOUSE	BB1E2	IgG2a	ALEXA FLUOR® 647	100 TESTS	F	MCA1450A647	Q
CD122	HUM	MOUSE	MIK-beta 1	IgG2a	PURIFIED	0.2mg	F	MCA1941	Q
CD150	HUM	MOUSE	A12	IgG1	PURIFIED	0.2mg	F,IP	MCA2251	Q
CD150	HUM	MOUSE	A12	IgG1	FITC	0.1mg	F	MCA2251F	N
CD150	HUM	MOUSE	A12	IgG1	PURIFIED	0.1mg	F,IP	MCA2251GA	J
CD150	HUM	MOUSE	A12	IgG1	AZIDE FREE	1.0mg	F,FN,IP	MCA2251XZ	Z
CD154	HUM	RAT	YMF323.6.2	IgG2a	FITC	0.1mg	F	MCA1938F	N
CD154	HUM	RAT	YMF323.6.2	IgG2a	AZIDE FREE	1.0mg	F	MCA1938XZ	Z
CD162	HUM	MOUSE	TBS	IgG1	PURIFIED	0.2mg	F	MCA2239	Q
CD195	HUM	RAT	HEK/1/85a	IgG2a	ALEXA FLUOR® 488	100 TESTS	F	MCA2175A488	P
CD195	HUM	RAT	HEK/1/85a	IgG2a	RPE	100 TESTS	F	MCA2175PE	T
CD205	HUM	MOUSE	MG38	IgG2b	PURIFIED	0.2mg	C,F*,IP	MCA2258	S
CD205	HUM	MOUSE	MG38	IgG2b	FITC	0.1mg	F*	MCA2258F	Q
CD205	HUM	MOUSE	MG38	IgG2b	AZIDE FREE	1.0mg	C,F*,IP	MCA2258XZ	Z
CD210	HUM	RAT	3F9-2	IgG2a	RPE	100 TESTS	F	MCA2255PE	S
CD210	HUM	RAT	3F9-2	IgG2a	AZIDE FREE	1.0mg	F,FN	MCA2255XZ	Z
CD226	HUM	MOUSE	DX11	IgG1	PURIFIED	0.2mg	F,IP	MCA2257	Q
CD226	HUM	MOUSE	DX11	IgG1	BIOTIN	0.1mg	F,IP	MCA2257B	N
CD226	HUM	MOUSE	DX11	IgG1	LOW ENDOTOXIN	0.5mg	F,FN,IP	MCA2257EL	X
CD226	HUM	MOUSE	DX11	IgG1	FITC	0.1mg	F	MCA2257F	N
CD226	HUM	MOUSE	DX11	IgG1	PURIFIED	0.1mg	F,IP	MCA2257GA	J
CD226	HUM	MOUSE	DX11	IgG1	AZIDE FREE	1.0mg	F,FN,IP	MCA2257XZ	Z
CD247	HUM	MOUSE	G3	IgG2a	FITC	0.5mg	F*	MCA1297FB	B1
CD247	HUM	MOUSE	G3	IgG2a	RPE	100 TESTS	F	MCA1297PE	T
DENDRITIC CELL EXCLUSION COCKTAIL	HUM	MOUSE	S4.1/TUK4/3G8/SJ25-C1/581		RPE-CY5	50 TESTS	F	MCA2248C	Y
DESMOGLEIN 1	HUM	MOUSE	27B2	IgG1	PURIFIED	0.2mg	C,IP,WB	MCA2271	Q
DESMOGLEIN 2	HUM	MOUSE	6D8	IgG1	PURIFIED	0.2mg	C,IP,WB	MCA2272	Q
DESMOGLEIN 3	HUM	MOUSE	5G11	IgG1	PURIFIED	0.2mg	C,F,IP,WB	MCA2273	Q
EGF R	HUM	RAT	ICR10	IgG2a	RPE	100 TESTS	F	MCA1784PE	S
EGF R	HUM	SHEEP	C1.1	IgG	PURIFIED	0.5mg	E,F	MCA2199	P
FGF-BASIC	HUM	GOAT			PURIFIED	0.1mg	E,FN,WB	AHP830	W
HLA CLASS II DR	HUM	MOUSE	HL-39	IgG3	APC	100 TESTS	F	MCA1879APC	T
HLA ABC	HUM	MOUSE	W6/32	IgG2a	ALEXA FLUOR® 488	100 TESTS	F	MCA81A488	P
HLA ABC	HUM	MOUSE	W6/32	IgG2a	ALEXA FLUOR® 647	100 TESTS	F	MCA81A647	P

† NOT FOR SALE IN USA

Human Reagents continued

Specificity	Target Species	Host	Clone	Isotype	Format	Quantity	Applications	Product Code	Price Code
HLA-A2	HUM	MOUSE	BB7.2	IgG2b	ALEXA FLUOR® 488	100 TESTS	F	MCA2090A488	P
HLA-A2	HUM	MOUSE	BB7.2	IgG2b	ALEXA FLUOR® 647	100 TESTS	F	MCA2090A647	P
IFN GAMMA	HUM	MOUSE	B27	IgG1	PURIFIED	0.5mg	E,F*	MCA1554	T
IFN GAMMA	HUM	MOUSE	B27	IgG1	BIOTIN	0.2mg	F*,WB	MCA1554B	P
IFN GAMMA	HUM	MOUSE	B27	IgG1	BIOTIN	0.5mg	F*,WB	MCA1554BB	X
IFN GAMMA	HUM	MOUSE	B27	IgG1	AZIDE FREE	1.0mg	E,F*,FN	MCA1554XZ	Z
IFN GAMMA	HUM	MOUSE	A35	IgG1	PURIFIED	0.5mg	E,F*	MCA2252	T
IFN GAMMA	HUM	MOUSE	A35	IgG1	AZIDE FREE	1.0mg	E,F*	MCA2252XZ	Z
JAM-1	HUM	MOUSE	BV16	IgG2b	PURIFIED	0.2mg	C,F	MCA2269	T
JAM-1	HUM	MOUSE	M.Ab.F11	IgG1	PURIFIED	0.2mg	F,IP,WB	MCA2270	T
JAM-2	MOUSE	RAT	CRAM-19 H36	IgG2a	PURIFIED	0.25mg	C,F,IP	MCA2210	P
KALLIKREIN 6	HUM	MOUSE	S2E5	IgG1	PURIFIED	20ug	C,P	MCA2158T	E
KALLIKREIN 11	HUM	MOUSE	FB6MA11	IgG1	PURIFIED	20ug	C,P	MCA2156T	E
KIR	HUM	MOUSE	NKVFS1	IgG1	PURIFIED	0.2mg	E,F,IP,WB	MCA2243	Q
KIR	HUM	MOUSE	NKVFS1	IgG1	BIOTIN	0.1mg	F	MCA2243B	N
KIR	HUM	MOUSE	NKVFS1	IgG1	LOW ENDOTOXIN	0.5mg	E,F,FN,IP,WB	MCA2243EL	X
KIR	HUM	MOUSE	NKVFS1	IgG1	FITC	0.1mg	F	MCA2243F	N
KIR	HUM	MOUSE	NKVFS1	IgG1	PURIFIED	0.1mg	E,F,IP,WB	MCA2243GA	J
KIR	HUM	MOUSE	NKVFS1	IgG1	RPE	100 TESTS	F	MCA2243PE	S
KIR	HUM	MOUSE	NKVFS1	IgG1	AZIDE FREE	1.0mg	E,F,FN,IP,WB	MCA2243XZ	Z
LAIR-1	HUM	MOUSE	NKTA255	IgG1	PURIFIED	0.2mg	F,IP,WB	MCA2242	Q
LAIR-1	HUM	MOUSE	NKTA255	IgG1	BIOTIN	0.1mg	F	MCA2242B	N
LAIR-1	HUM	MOUSE	NKTA255	IgG1	LOW ENDOTOXIN	0.5mg	F,FN,IP,WB	MCA2242EL	X
LAIR-1	HUM	MOUSE	NKTA255	IgG1	FITC	0.1mg	F	MCA2242F	N
LAIR-1	HUM	MOUSE	NKTA255	IgG1	PURIFIED	0.1mg	F,IP,WB	MCA2242GA	J
LAIR-1	HUM	MOUSE	NKTA255	IgG1	RPE	100 TESTS	F	MCA2242PE	S
LAIR-1	HUM	MOUSE	NKTA255	IgG1	AZIDE FREE	1.0mg	F,FN,IP,WB	MCA2242XZ	Z
MAST CELL TRYPTASE	HUM	MOUSE	AA1	IgG1	PURIFIED	20ug	C,P*	MCA1438T	C
MMP-2 (HINGE)	HUM	RABBIT			PURIFIED	20ug	P	AHP743T	E
MMP-9	HUM	MOUSE	GE213	IgG1	PURIFIED	20ug	C	MCA1977T	E
OESTROGEN RECEPTOR BETA 2	HUM	MOUSE	57/3	IgG1	CON S/N	1.0ml	P*,WB	MCA2279S	W
RITUXIMAB		RAT	MB2 A4	IgG2a	PURIFIED	0.2mg	E,F	MCA2260	S
RITUXIMAB		RAT	MB2 A4	IgG2a	FITC	0.1mg	F	MCA2260F	Q
TLR3	HUM	MOUSE	TLR3.7	IgG1	PURIFIED	0.2mg	F*,IP,WB	MCA2267	S
TLR4	HUM	MOUSE	HTA125	IgG2a	ALEXA FLUOR® 488	100 TESTS	F	MCA2061A488	P
TLR4	HUM	MOUSE	HTA125	IgG2a	ALEXA FLUOR® 647	100 TESTS	F	MCA2061A647	P
TLR9	HUM	MOUSE	5G5	IgG2a	PURIFIED	0.25mg	C,F,WB	MCA2265	Q
TROPONIN T	AVI	MOUSE	T1/61	IgG1	PURIFIED	20ug	C,P	MCA470T	C
TSH RECEPTOR	HUM	MOUSE	4C1	IgG2a	PURIFIED	20ug	C,P	MCA1571T	E
VEGF	HUM	GOAT			PURIFIED	0.1mg	E,IP,WB	AHP831	W

serotecFL™ DIAGNOSTIC ANTIBODIES (NOT FOR USE IN USA)

Specificity	Target Species	Host	Clone	Isotype	Format	Quantity	Applications	Product Code	Price Code
CD3	HUM	MOUSE	MEM-57	IgG2a	FITC	100 TESTS	F	SFL2184F	N
CD4	HUM	MOUSE	RPA-T4	IgG1	FITC	100 TESTS	F	SFL1267F	N
CD4	HUM	MOUSE	RPA-T4	IgG1	RPE	100 TESTS	F	SFL1267PE	S
CD5	HUM	MOUSE	MF7-14.5	IgG2a	FITC	100 TESTS	F	SFL1341F	N
CD5	HUM	MOUSE	MF7-14.5	IgG2a	RPE	100 TESTS	F	SFL1341PE	S
CD8	HUM	MOUSE	LT8	IgG1	FITC	100 TESTS	F	SFL1226F	N
CD8	HUM	MOUSE	LT8	IgG1	RPE	100 TESTS	F	SFL1226PE	S
CD10	HUM	MOUSE	SN5c	IgG1	FITC	100 TESTS	F	SFL1556F	N
CD10	HUM	MOUSE	SN5c	IgG1	RPE	100 TESTS	F	SFL1556PE	S
CD13	HUM	MOUSE	WM15	IgG1	FITC	100 TESTS	F	SFL1270F	N
CD13	HUM	MOUSE	WM15	IgG1	RPE	100 TESTS	F	SFL1270PE	S
CD14	HUM	MOUSE	MEM-18	IgG1	FITC	100 TESTS	F	SFL2185F	N
CD14	HUM	MOUSE	MEM-18	IgG1	RPE	100 TESTS	F	SFL2185PE	S
CD16	HUM	MOUSE	LNK16	IgG1	FITC	100 TESTS	F	SFL1193F	N
CD19	HUM	MOUSE	LT19	IgG1	FITC	100 TESTS	F	SFL1940F	N
CD19	HUM	MOUSE	LT19	IgG1	RPE	100 TESTS	F	SFL1940PE	S
CD20	HUM	MOUSE	2H7	IgG2b	FITC	100 TESTS	F	SFL1710F	N
CD20	HUM	MOUSE	2H7	IgG2b	RPE	100 TESTS	F	SFL1710PE	S
CD22	HUM	MOUSE	Mc64-12	IgG1	FITC	100 TESTS	F	SFL1380F	N
CD22	HUM	MOUSE	Mc64-12	IgG1	RPE	100 TESTS	F	SFL1380PE	S
CD33	HUM	MOUSE	WM53	IgG1	FITC	100 TESTS	F	SFL1271F	N
CD33	HUM	MOUSE	WM53	IgG1	RPE	100 TESTS	F	SFL1271PE	S
CD45	HUM	MOUSE	F10-89-4	IgG2a	FITC	100 TESTS	F	SFL87F	N
CD45	HUM	MOUSE	F10-89-4	IgG2a	RPE	100 TESTS	F	SFL87PE	S
CD52	HUM	RAT	YTH34.5	IgG2b	FITC	100 TESTS	F	SFL1642F	P
CD52	HUM	RAT	YTH34.5	IgG2b	RPE	100 TESTS	F	SFL1642PE	T
CD56	HUM	MOUSE	MEM-188	IgG2a	FITC	100 TESTS	F	SFL2046F	N
CD61	HUM	MOUSE	PM6/13	IgG1	FITC	100 TESTS	F	SFL728F	P

serotecFL™ DIAGNOSTIC ANTIBODIES (NOT FOR USE IN USA) continued

Specificity	Target Species	Host	Clone	Isotype	Format	Quantity	Applications	Product Code	Price Code
CD61	HUM	MOUSE	PM6/13	IgG1	RPE	100 TESTS	F	SFL728PE	T
CD79a	HUM	MOUSE	ZL7-4	IgG1	FITC	100 TESTS	F	SFL1298F	P
HLA CLASS II DR	HUM	MOUSE	HL-39	IgG3	FITC	100 TESTS	F	SFL1879F	N
HLA CLASS II DR	HUM	MOUSE	HL-39	IgG3	RPE	100 TESTS	F	SFL1879PE	S
MOUSE IgG1 NEGATIVE CONTROL	HUM	MOUSE		IgG1	FITC	100 TESTS	F	SFL928F	K
MOUSE IgG1 NEGATIVE CONTROL	HUM	MOUSE		IgG1	RPE	100 TESTS	F	SFL928PE	L
MOUSE IgG2a NEGATIVE CONTROL	HUM	MOUSE		IgG2a	FITC	100 TESTS	F	SFL929F	K
MOUSE IgG2a NEGATIVE CONTROL	HUM	MOUSE		IgG2a	RPE	100 TESTS	F	SFL929PE	L
MOUSE IgG2b NEGATIVE CONTROL	HUM	MOUSE		IgG2b	FITC	100 TESTS	F	SFL691F	K
MOUSE IgG2b NEGATIVE CONTROL	HUM	MOUSE		IgG2b	RPE	100 TESTS	F	SFL691PE	L
MOUSE IgG3 NEGATIVE CONTROL	HUM	MOUSE		IgG3	RPE	100 TESTS	F	SFL2063PE	L

HISTOLOGY ANTIBODIES FOR PARAFFIN SECTIONS

Specificity	Target Species	Host	Clone	Isotype	Format	Quantity	Applications	Product Code	Price Code
CATHEPSIN B	HUM	RABBIT			PURIFIED	20ug	C,P	AHP591T	C
CATHEPSIN H	HUM	MOUSE	1D10	IgG1	PURIFIED	20ug	C,P*	MCA2067T	C
CATHEPSIN L	HUM	MOUSE	N135	IgG1	PURIFIED	20ug	C,P*	MCA2066T	C
CATHEPSIN S	HUM	MOUSE	1E3	IgG1	PURIFIED	20ug	C,P*	MCA2075T	C
CYTOKERATIN 18	HUM	MOUSE	CY90	IgG1	READY TO USE	1.0ml	C,P*	MCA1864HT	C
DOPAMINE		RABBIT			S/N	0.1ml	C*,P*	AHP847	U
GFAP	HUM	MOUSE	6F2	IgG1	CONCENTRATED	1.0ml	C,P	MCA2304	U
GFAP	HUM	MOUSE	6F2	IgG1	READY TO USE	6.0ml	C,P	MCA2304H	L
GFAP	HUM	MOUSE	6F2	IgG1	READY TO USE	1.0ml	C,P	MCA2304HT	E
STEFIN A	HUM	MOUSE	C5/2	IgG1	PURIFIED	20ug	C,P*	MCA2069T	C
STEFIN B	HUM	MOUSE	A612	IgG1	PURIFIED	20ug	C,P*	MCA2070T	C

NEUROLOGY REAGENTS

Specificity	Target Species	Host	Clone	Isotype	Format	Quantity	Applications	Product Code	Price Code
BOMBESIN		RABBIT			SERUM	20ul	C,P,RE	PEPA23T	E
GALANIN	POR	RABBIT			SERUM	20ul	C,P,RE	PEPA31T	E
NEUROTENSIN		RABBIT			SERUM	20ul	C,P,RE	PEPA36T	E
SUBSTANCE P	HUM	RABBIT			SERUM	20ul	C,P,RE	PEPA40T	E
VASO-INTESTINAL PEPTIDE	POR	RABBIT			SERUM	20ul	C,P	PEPA41T	E

CELL BIOLOGY REAGENTS

Specificity	Target Species	Host	Clone	Isotype	Format	Quantity	Applications	Product Code	Price Code
bad		RABBIT			SERUM	20ul	P*	AHP475T	C
CCT BETA	HUM	RAT	PK/8/4/4i/2f	IgG2b	PURIFIED	0.1mg	WB	MCA2275	S
CCT DELTA		RAT	PK/9/866	IgG2b	PURIFIED	0.1mg	IP,SS,WB	MCA2177	S
CCT EPSILON		RAT	PK/29/23	IgG2a	PURIFIED	0.1mg	IP,SS,WB	MCA2178	S
CCT ETA		RAT	PK/16/8/a	IgG2a	PURIFIED	0.1mg	WB	MCA2179	S
CCT THETA		RAT	PK/13/72	IgG2a	PURIFIED	0.1mg	IP,WB	MCA2180	S
C-FOS	HUM	SHEEP			PURIFIED	0.1mg	WB	AHP836	S
FEN1	HUM	RABBIT			PURIFIED	0.1mg	IP,WB	AHP837	T
H2AX	HUM	RABBIT			PURIFIED	0.1mg	IP,WB	AHP838	T
H4 (DIMETHYL K20)		RAT	2B8	IgG2a	PURIFIED	0.1mg	IP,WB	MCA2323	Q
MCM3	HUM	GOAT			PURIFIED	0.1mg	WB	AHP839	T
MCM4	HUM	GOAT			PURIFIED	0.1mg	WB	AHP840	T
MCM6	HUM	RABBIT			PURIFIED	0.1mg	WB	AHP841	T
MRE11	HUM	RABBIT			PURIFIED	0.1mg	WB	AHP843	T
NBS1	HUM	RABBIT			PURIFIED	0.1mg	IP,WB	AHP842	T
PI-3 KINASE p85 BETA	HUM	MOUSE	T15	IgG1	PURIFIED	0.1mg	C,IP,WB	MCA1170G	Q
PG\LC TRANSPORTER	HUM	RABBIT			PURIFIED	0.1mg	P*	AHP834	S
PG\LC TRANSPORTER	RAT	RABBIT			PURIFIED	0.1mg	P*,WB	AHP835	S
PG\LC TRANSPORTER	RAT	MOUSE	33-01	IgG3	PURIFIED	0.1mg	P*	MCA2322	S
RAD17	HUM	GOAT			PURIFIED	0.1mg	WB	AHP844	T
RAF-1 (P233)		RAT	Roy/28/1	IgG	PURIFIED	0.1mg	WB	MCA2174	S
XRCC1	HUM	RABBIT			PURIFIED	0.1mg	C,IP,WB	AHP832	T

RODENT REAGENTS (MOUSE)

Specificity	Target Species	Host	Clone	Isotype	Format	Quantity	Applications	Product Code	Price Code
BETA GLUCAN RECEPTOR	MOUSE	RAT	2A11	IgG2b	PURIFIED	0.25mg	F,IP	MCA2289	P
BETA GLUCAN RECEPTOR	MOUSE	RAT	2A11	IgG2b	FITC	0.1mg	F	MCA2289F	N
BETA GLUCAN RECEPTOR	MOUSE	RAT	2A11	IgG2b	PURIFIED	0.1mg	F,IP	MCA2289GA	K
CD3 EPSILON (T3)	MOUSE	RAT	KT3	IgG2a	ALEXA FLUOR® 405	100 TESTS	F	MCA500A405	Q
CD3 EPSILON (T3)	MOUSE	RAT	KT3	IgG2a	ALEXA FLUOR® 488	100 TESTS	F	MCA500A488	L
CD3 EPSILON (T3)	MOUSE	RAT	KT3	IgG2a	ALEXA FLUOR® 647	100 TESTS	F	MCA500A647	L
CD3 EPSILON (T3)	MOUSE	RAT	KT3	IgG2a	APC	100 TESTS	F	MCA500APC	T
CD4	MOUSE	RAT	YTS191.1	IgG2b	ALEXA FLUOR® 488	100 TESTS	F	MCA1767A488	L
CD4	MOUSE	RAT	YTS191.1	IgG2b	APC	100 TESTS	F	MCA1767APC	T
CD5	MOUSE	RAT	YTS 121.5.2	IgG2b	PURIFIED	0.25mg	F	MCA2280	N
CD5	MOUSE	RAT	YTS 121.5.2	IgG2b	PURIFIED	0.1mg	F	MCA2280GA	I
CD8 ALPHA	MOUSE	RAT	KT15	IgG2a	ALEXA FLUOR® 488	100 TESTS	F	MCA609A488	L
CD8 ALPHA	MOUSE	RAT	KT15	IgG2a	ALEXA FLUOR® 647	100 TESTS	F	MCA609A647	L
CD8 ALPHA	MOUSE	RAT	KT15	IgG2a	APC	100 TESTS	F	MCA609APC	T
CD11b	MOUSE	RAT	M1/70.15	IgG2b	ALEXA FLUOR® 488	100 TESTS	F	MCA74A488	L
CD11b	MOUSE	RAT	M1/70.15	IgG2b	ALEXA FLUOR® 647	100 TESTS	F	MCA74A647	L
CD11c	MOUSE	HAMSTER	N418	IgG	PURIFIED	0.25mg	C,F	MCA1369	N
CD11c	MOUSE	HAMSTER	N418	IgG	ALEXA FLUOR® 488	100 TESTS	F	MCA1369A488	L
CD11c	MOUSE	HAMSTER	N418	IgG	ALEXA FLUOR® 647	100 TESTS	F	MCA1369A647	L
CD11c	MOUSE	HAMSTER	N418	IgG	BIOTIN	0.1mg	F	MCA1369B	J
CD11c	MOUSE	HAMSTER	N418	IgG	LOW ENDOTOXIN	0.5mg	C,F,IP	MCA1369EL	X
CD11c	MOUSE	HAMSTER	N418	IgG	FITC	0.1mg	F	MCA1369F	J
CD11c	MOUSE	HAMSTER	N418	IgG	FITC	0.5mg	F	MCA1369FB	X
CD11c	MOUSE	HAMSTER	N418	IgG	PURIFIED	0.1mg	C,F	MCA1369GA	I
CD11c	MOUSE	HAMSTER	N418	IgG	RPE	100 TESTS	F	MCA1369PE	L
CD11c	MOUSE	HAMSTER	N418	IgG	AZIDE FREE	1.0mg	C,F	MCA1369XZ	Z
CD13	MOUSE	RAT	R3-63	IgG2a	ALEXA FLUOR® 488	100 TESTS	F	MCA2183A488	L
CD13	MOUSE	RAT	R3-63	IgG2a	ALEXA FLUOR® 647	100 TESTS	F	MCA2183A647	L
CD13	MOUSE	RAT	R3-63	IgG2a	BIOTIN	0.1ug	F	MCA2183B	J
CD13	MOUSE	RAT	R3-63	IgG2a	BIOTIN	0.5mg	F	MCA2183BB	X
CD13	MOUSE	RAT	R3-63	IgG2a	FITC	0.5mg	F	MCA2183FB	X
CD13	MOUSE	RAT	R3-63	IgG2a	RPE	100 TESTS	F	MCA2183PE	L
CD19	MOUSE	RAT	6D5	IgG2a	ALEXA FLUOR® 405	100 TESTS	F	MCA1439A405	Q
CD19	MOUSE	RAT	6D5	IgG2a	ALEXA FLUOR® 488	100 TESTS	F	MCA1439A488	L
CD19	MOUSE	RAT	6D5	IgG2a	ALEXA FLUOR® 647	100 TESTS	F	MCA1439A647	L
CD19	MOUSE	RAT	6D5	IgG2a	APC	100 TESTS	F	MCA1439APC	T
CD22	MOUSE	RAT	OX-96	IgG1	RPE	100 TESTS	F	MCA2186PE	L
CD22	MOUSE	RAT	OX-97	IgG1	BIOTIN	0.1mg	F	MCA2187B	J
CD22	MOUSE	RAT	OX-97	IgG1	RPE	100 TESTS	F	MCA2187PE	L
CD30	MOUSE	RAT	YMSM 636.4.10	IgG2b	PURIFIED	0.1mg	E,F	MCA1691GA	I
CD30	MOUSE	RAT	YMSM 636.4.10	IgG2b	AZIDE FREE	1.0mg	E,F	MCA1691XZ	Z
CD34	MOUSE	RAT	MEC14.7	IgG2a	ALEXA FLUOR® 488	100 TESTS	F	MCA1825A488	L
CD34	MOUSE	RAT	MEC14.7	IgG2a	ALEXA FLUOR® 647	100 TESTS	F	MCA1825A647	L
CD40	MOUSE	RAT	3/23	IgG2a	ALEXA FLUOR® 488	100 TESTS	F	MCA1143A488	L
CD40	MOUSE	RAT	3/23	IgG2a	ALEXA FLUOR® 647	100 TESTS	F	MCA1143A647	L
CD40	MOUSE	RAT	3/23	IgG2a	LOW ENDOTOXIN	0.5mg	C,E,F,FN	MCA1143EL	X
CD41	MOUSE	RAT	MWReg30	IgG1	PURIFIED	0.25mg	C,F,IP	MCA2245	N
CD41	MOUSE	RAT	MWReg30	IgG1	BIOTIN	0.1mg	F	MCA2245B	J
CD41	MOUSE	RAT	MWReg30	IgG1	LOW ENDOTOXIN	0.5mg	C,F,FN,IP	MCA2245EL	X
CD41	MOUSE	RAT	MWReg30	IgG1	FITC	0.1mg	F	MCA2245F	J
CD41	MOUSE	RAT	MWReg30	IgG1	PURIFIED	0.1mg	C,F,IP	MCA2245GA	I
CD41	MOUSE	RAT	MWReg30	IgG1	RPE	100 TESTS	F	MCA2245PE	L
CD41	MOUSE	RAT	MWReg30	IgG1	AZIDE FREE	1.0mg	C,F,FN,IP	MCA2245XZ	Z
CD45R	MOUSE	RAT	RA3-6B2	IgG2a	ALEXA FLUOR® 647	100 TESTS	F	MCA1258A647	L
CD62L	MOUSE	RAT	MEL-14	IgG2a	RPE	100 TESTS	F	MCA1259PE	T
CD68	MOUSE	RAT	FA-11	IgG2a	ALEXA FLUOR® 488	100 TESTS	F	MCA1957A488	P
CD68	MOUSE	RAT	FA-11	IgG2a	ALEXA FLUOR® 647	100 TESTS	F	MCA1957A647	P
CD71	MOUSE	RAT	YTA74.4	IgG2a	ALEXA FLUOR® 647	100 TESTS	F	MCA1033A647	L
CD79b	MOUSE	HAMSTER	HM79-11	IgG	ALEXA FLUOR® 488	100 TESTS	F	MCA1821A488	L
CD79b	MOUSE	HAMSTER	HM79-11	IgG	ALEXA FLUOR® 647	100 TESTS	F	MCA1821A647	L
CD90	RAT	MOUSE	OX-7	IgG1	ALEXA FLUOR® 488	100 TESTS	F	MCA47A488	N
CD90	RAT	MOUSE	OX-7	IgG1	ALEXA FLUOR® 647	100 TESTS	F	MCA47A647	N
CD90	RAT	MOUSE	OX-7	IgG1	LOW ENDOTOXIN	0.5mg	C,F,WB	MCA47EL	X
CD134	MOUSE	RAT	OX-86	IgG1	ALEXA FLUOR® 647	100 TESTS	F	MCA1420A647	L
CD137L	MOUSE	RAT	AT113-2	IgG1	PURIFIED	0.25mg	F,IP	MCA2286	N
CD150	MOUSE	RAT	9D1	IgG1	PURIFIED	0.25mg	F	MCA2274	N
CD150	MOUSE	RAT	9D1	IgG1	PURIFIED	0.1mg	F	MCA2274GA	I
CD204	MOUSE	RAT	2F8	IgG2b	ALEXA FLUOR® 488	100 TESTS	F	MCA1322A488	P
CD204	MOUSE	RAT	2F8	IgG2b	ALEXA FLUOR® 647	100 TESTS	F	MCA1322A647	P
CD206	MOUSE	RAT	MR5D3	IgG2a	ALEXA FLUOR® 488	100 TESTS	F	MCA2235A488	P

RODENT REAGENTS (MOUSE)

Specificity	Target Species	Host	Clone	Isotype	Format	Quantity	Applications	Product Code	Price Code
CD206	MOUSE	RAT	MR5D3	IgG2a	ALEXA FLUOR® 647	100 TESTS	F	MCA2235A647	P
CD206	MOUSE	RAT	MR5D3	IgG2a	BIOTIN	0.1mg	F*	MCA2235B	N
CD206	MOUSE	RAT	MR5D3	IgG2a	FITC	0.1mg	F*	MCA2235F	N
CD206	MOUSE	RAT	MR5D3	IgG2a	FITC	0.5mg	F*	MCA2235FB	B1
CD206	MOUSE	RAT	MR5D3	IgG2a	RPE	100 TESTS	F*	MCA2235PE	Q
CD210	MOUSE	RAT	1B1.3a	IgG1	BIOTIN	0.1mg	F	MCA2256B	N
CD210	MOUSE	RAT	1B1.3a	IgG1	AZIDE FREE	1.0mg	F,FN	MCA2256XZ	Z
F4/80 ANTIGEN	MOUSE	RAT	CI:A3-1	IgG2b	ALEXA FLUOR® 405	100 TESTS	F	MCA497A405	T
F4/80 ANTIGEN	MOUSE	RAT	CI:A3-1	IgG2b	ALEXA FLUOR® 488	100 TESTS	F	MCA497A488	N
F4/80 ANTIGEN	MOUSE	RAT	CI:A3-1	IgG2b	ALEXA FLUOR® 647	100 TESTS	F	MCA497A647	N
IFN ALPHA	MOUSE	RAT	F18	IgG1	AZIDE FREE	1.0mg	FN	MCA1431XZ	Z
IL-2	MOUSE	RAT	JES65H4	IgG2b	BIOTIN	0.5mg	E,F*	MCA1303BB	X
IL-2	MOUSE	RAT	JES65H4	IgG2b	PURIFIED	0.5mg	E,F*,IP	MCA1303G	T
IL-2	MOUSE	RAT	JES65H4	IgG2b	AZIDE FREE	1.0mg	E,F*,IP	MCA1303XZ	Z
IL-2	MOUSE	RAT	JES6-1A12	IgG2a	AZIDE FREE	1.0mg	E,F*,FN,IP,WB	MCA1493XZ	Z
IL-4	MOUSE	RAT	BVD4-1D11	IgG1	PURIFIED	0.5mg	C,E,F*,WB	MCA1304G	T
IL-4	MOUSE	RAT	BVD4-1D11	IgG1	AZIDE FREE	1.0mg	C,E,F*,FN,WB	MCA1304XZ	Z
IL-4	MOUSE	RAT	BVD6-24G2	IgG1	PURIFIED	0.5mg	C,E,F*	MCA1492	T
JAM-1	MOUSE	RAT	BV12	IgG	PURIFIED	0.25mg	F,IP	MCA2268	W
JAM-2	MOUSE	RAT	CRAM-19 H36	IgG2a	BIOTIN	0.1mg	F	MCA2210B	N
JAM-2	MOUSE	RAT	CRAM-19 H36	IgG2a	FITC	0.1mg	F	MCA2210F	N
JAM-2	MOUSE	RAT	CRAM-18 F26	IgG2a	PURIFIED	0.25mg	C,F	MCA2211	P
JAM-2	MOUSE	RAT	CRAM-18 F26	IgG2a	BIOTIN	0.1mg	F	MCA2211B	N
JAM-2	MOUSE	RAT	CRAM-18 F26	IgG2b	FITC	0.1mg	F	MCA2211F	N
JAM-2	MOUSE	RAT	CRAM-18 F26	IgG2a	AZIDE FREE	1.0mg	C,F,FN	MCA2211XZ	Z
LYMPHOTOXIN BETA RECEPTOR	MOUSE	RAT	5G11b	IgG2a	BIOTIN	0.1mg	F	MCA2244B	K
LYMPHOTOXIN BETA RECEPTOR	MOUSE	RAT	5G11b	IgG2a	FITC	0.1mg	F	MCA2244F	K
MARCO	MOUSE	RAT	ED31	IgG1	RPE	0.1mg	F	MCA1849PE	T
MD-1	MOUSE	RAT	MD113	IgG2b	PURIFIED	0.25mg	F	MCA2264	Q
MHC CLASS I	MOUSE	MOUSE	2G5	IgG2b	RPE	0.1mg	F	MCA2189PE	Q
MOUSE IgE	MOUSE	GOAT			ALK. PHOS.	0.5mg	E	STAR110A	T
MOUSE IgE	MOUSE	GOAT			HRP	0.5mg	E	STAR110P	N
MOUSE IgG (H&L) (MULTISPECIES ADSORBED)	MOUSE	GOAT			PURIFIED	0.5mg	E,F,WB	STAR117	I
MOUSE IgG (H&L) (MULTISPECIES ADSORBED)	MOUSE	GOAT			ALK. PHOS.	0.5mg	E,WB	STAR117A	L
MOUSE IgG (H&L) (MULTISPECIES ADSORBED)	MOUSE	GOAT			FITC	0.5mg	F	STAR117F	K
MOUSE IgG (H&L) (MULTISPECIES ADSORBED)	MOUSE	GOAT			HRP	0.5mg	E,WB	STAR117P	K
PURIFIED MOUSE IgE		MOUSE		IgE	PURIFIED	0.5mg	E	PMP68	Q
TCR ALPHA/BETA	MOUSE	HAMSTER	H57-597	IgG	RPE	100 TESTS	F	MCA1413PE	N
TLR2	MOUSE	RAT	6C2	IgG2a	PURIFIED	0.25mg	F,IP	MCA2266	Q
TNF ALPHA	MOUSE	RAT	MP6-XT3	IgG1	AZIDE FREE	1.0mg	E,F*,FN,WB	MCA1487XZ	Z
TNF ALPHA	MOUSE	RAT	MP6-XT22	IgG1	PURIFIED	0.5mg	C,E,F*	MCA1488	T
TNF ALPHA	MOUSE	RAT	MP6-XT22	IgG1	BIOTIN	0.5mg	E,F*	MCA1488BB	X
TNF ALPHA	MOUSE	RAT	MP6-XT22	IgG1	AZIDE FREE	1.0mg	C,E,F*,FN	MCA1488XZ	Z

RODENT REAGENTS (RAT)

Specificity	Target Species	Host	Clone	Isotype	Format	Quantity	Applications	Product Code	Price Code
CD2	RAT	MOUSE	OX-34	IgG2a	ALEXA FLUOR® 488	100 TESTS	F	MCA154A488	N
CD2	RAT	MOUSE	OX-34	IgG2a	ALEXA FLUOR® 647	100 TESTS	F	MCA154A647	N
CD4 DOMAIN 1	RAT	MOUSE	W3/25	IgG1	ALEXA FLUOR® 488	100 TESTS	F	MCA55A488	N
CD4/CD8	RAT	MOUSE	W3/25/OX-8	IgG1/IgG1	FITC/RPE	100 TESTS	F	DC043	Q
CD4/CD25	RAT	MOUSE	W3/25/OX-39	IgG1/IgG1	FITC/RPE	100 TESTS	F	DC040	Q
CD5	RAT	MOUSE	OX-19	IgG1	ALEXA FLUOR® 488	100 TESTS	F	MCA52A488	N
CD5	RAT	MOUSE	OX-19	IgG1	ALEXA FLUOR® 647	100 TESTS	F	MCA52A647	N
CD8 ALPHA	RAT	MOUSE	OX-8	IgG1	ALEXA FLUOR® 488	100 TESTS	F	MCA48A488	N
CD8 ALPHA	RAT	MOUSE	OX-8	IgG1	ALEXA FLUOR® 647	100 TESTS	F	MCA48A647	N
CD11a	RAT	MOUSE	WT.1	IgG2a	ALEXA FLUOR® 488	100 TESTS	F	MCA774A488	N
CD11a	RAT	MOUSE	WT.1	IgG2a	ALEXA FLUOR® 647	100 TESTS	F	MCA774A647	N
CD11b	RAT	MOUSE	OX-42	IgG2a	ALEXA FLUOR® 647	100 TESTS	F	MCA275A647	N
CD11b	RAT	MOUSE	OX-42	IgG2a	ALEXA FLUOR® 488	100 TESTS	F	MCA275A488	N
CD25	RAT	MOUSE	OX-39	IgG1	ALEXA FLUOR® 488	100 TESTS	F	MCA273A488	N
CD25	RAT	MOUSE	OX-39	IgG1	ALEXA FLUOR® 647	100 TESTS	F	MCA273A647	N
CD25	RAT	MOUSE	OX-39	IgG1	PURIFIED	0.1mg	C,E,F,P*	MCA273GA	J
CD25	RAT	MOUSE	OX-39	IgG1	PURIFIED	0.25mg	C,E,F,P*	MCA273R	L

RODENT REAGENTS (RAT) continued

Specificity	Target Species	Host	Clone	Isotype	Format	Quantity	Applications	Product Code	Price Code
CD28	RAT	MOUSE	JJ319	IgG1	ALEXA FLUOR® 488	100 TESTS	F	MCA1331A488	N
CD28	RAT	MOUSE	JJ319	IgG1	ALEXA FLUOR® 647	100 TESTS	F	MCA1331A647	N
CD31	RAT	MOUSE	TLD-3A12	IgG1	LOW ENDOTOXIN	0.5mg	C,E,F,WB	MCA1334EL	X
CD45	RAT	MOUSE	OX-1	IgG1	ALEXA FLUOR® 488	100 TESTS	F	MCA43A488	N
CD45	RAT	MOUSE	OX-1	IgG1	ALEXA FLUOR® 647	100 TESTS	F	MCA43A647	N
CD45RA (B-CELLS ONLY)	RAT	MOUSE	OX-33	IgG1	ALEXA FLUOR® 488	100 TESTS	F	MCA340A488	N
CD45RC	RAT	MOUSE	OX-22	IgG1	ALEXA FLUOR® 647	100 TESTS	F	MCA53A647	N
CD47	RAT	MOUSE	OX-101	IgG1	ALEXA FLUOR® 647	100 TESTS	F	MCA1997A647	N
CD54	RAT	MOUSE	1A29	IgG1	ALEXA FLUOR® 488	100 TESTS	F	MCA773A488	N
CD54	RAT	MOUSE	1A29	IgG1	ALEXA FLUOR® 647	100 TESTS	F	MCA773A647	N
CD54	RAT	MOUSE	1A29	IgG1	BIOTIN	0.1mg	F	MCA773B	L
CD68	RAT	MOUSE	ED1	IgG1	RPE	100 TESTS	F*	MCA341PE	T
CD86	RAT	MOUSE	OX-48	IgG1	RPE	100 TESTS	F	MCA2121PE	N
CD134	RAT	MOUSE	OX-40	IgG2b	AZIDE FREE	1.0mg	C,F	MCA730XZ	Z
CD152	RAT	MOUSE	WKH203	IgG1	PURIFIED	0.25mg	E.F*,WB	MCA2092	L
CD152	RAT	MOUSE	WKH203	IgG1	BIOTIN	0.1mg	F*	MCA2092B	S
CD152	RAT	MOUSE	WKH203	IgG1	FITC	0.1mg	F*	MCA2092F	S
CD152	RAT	MOUSE	WKH203	IgG1	AZIDE FREE	1.0mg	E,F*,FN	MCA2092XZ	Z
CD161	RAT	MOUSE	10/78	IgG1	ALEXA FLUOR® 488	100 TESTS	F	MCA1427A488	N
IFN GAMMA	RAT	GOAT			PURIFIED	0.05mg	E,WB	AAR34B	W
RAT IgA	RAT	GOAT			PURIFIED	0.5mg	E,IF,WB	STAR111	H
RAT IgA	RAT	GOAT			ALK. PHOS.	0.1mg	E,WB	STAR111A	J
RAT IgA	RAT	GOAT			FITC	0.5mg	IF	STAR111F	J
RAT IgA	RAT	GOAT			HRP	0.5mg	E,WB	STAR111P	J
RAT IgG1	RAT	GOAT			PURIFIED	0.5mg	E,F,WB	STAR112	H
RAT IgG1	RAT	GOAT			ALK. PHOS.	0.1mg	E,WB	STAR112A	L
RAT IgG1	RAT	GOAT			FITC	0.5mg	F	STAR112F	J
RAT IgG1	RAT	GOAT			HRP	0.5mg	E,WB	STAR112P	J
RAT IgG2a	RAT	GOAT			PURIFIED	0.5mg	E,F,WB	STAR113	H
RAT IgG2a	RAT	GOAT			ALK. PHOS.	0.1mg	E,WB	STAR113A	L
RAT IgG2a	RAT	GOAT			FITC	0.5mg	F	STAR113F	J
RAT IgG2a	RAT	GOAT			HRP	0.5mg	E,WB	STAR113P	J
RAT IgG2b	RAT	GOAT			PURIFIED	0.5mg	E,F,WB	STAR114	H
RAT IgG2b	RAT	GOAT			ALK. PHOS.	0.1mg	E,WB	STAR114A	L
RAT IgG2b	RAT	GOAT			FITC	0.5mg	F	STAR114F	J
RAT IgG2b	RAT	GOAT			HRP	0.5mg	E,WB	STAR114P	J
RAT IgG2b HEAVY CHAIN	RAT	MOUSE	MARG2b-3	IgG1	BIOTIN	0.5mg	E	MCA1294B	N
RAT IgG2c	RAT	GOAT			PURIFIED	0.5mg	E,F,WB	STAR115	H
RAT IgG2c	RAT	GOAT			ALK. PHOS.	0.1mg	E,WB	STAR115A	L
RAT IgG2c	RAT	GOAT			FITC	0.5mg	F	STAR115F	J
RAT IgG2c	RAT	GOAT			HRP	0.5mg	E,WB	STAR115P	J
RAT IgM	RAT	GOAT			PURIFIED	0.5mg	E,F,WB	STAR116	H
RAT IgM	RAT	GOAT			ALK. PHOS.	0.1mg	E,WB	STAR116A	J
RAT IgM	RAT	GOAT			FITC	0.5mg	F	STAR116F	J
RAT IgM	RAT	GOAT			HRP	0.5mg	E,WB	STAR116P	J
TCR ALPHA/BETA	RAT	MOUSE	R73	IgG1	AZIDE FREE	1.0mg	C,F,IP,FN	MCA453XZ	Z

VETERINARY REAGENTS

Specificity	Target Species	Host	Clone	Isotype	Format	Quantity	Applications	Product Code	Price Code
BU-1A	AVI	MOUSE	L22	IgG1	PURIFIED	0.25mg	C,F	MCA2170	Q
BU-1A	AVI	MOUSE	L22	IgG1	FITC	0.1mg	F	MCA2170F	Q
BU-1A	AVI	MOUSE	L22	IgG1	RPE	100 TESTS	F	MCA2170PE	T
CD1	OVI	MOUSE	20.27	IgG1	PURIFIED	0.25mg	C,F,IP	MCA2212	N
CD1	OVI	MOUSE	20.27	IgG1	FITC	0.1mg	F	MCA2212F	Q
CD2	BOV	MOUSE	CC42	IgG1	PURIFIED	0.25mg	C,F,IP,P*	MCA833G	N
CD3	CAN	MOUSE	CA17.2A12	IgG1	RPE	0.1mg	F	MCA1774PE	T
CD3/CD4	CAN	MOUSE/RAT	CA17.2A12/YKIX302.9	IgG1/IgG2a	FITC/RPE	100 TESTS	F	DC046	Q
CD3/CD8	CAN	MOUSE/RAT	CA17.2A12/YCATE55.9	IgG1/IgG1	FITC/RPE	100 TESTS	F	DC047	Q
CD4	CAN	RAT	YKIX302.9	IgG2a	ALEXA FLUOR® 647	100 TESTS	F	MCA1038A647	S
CD4	BOV	MOUSE	CC8	IgG2a	ALEXA FLUOR® 647	100 TESTS	F	MCA1653A647	S
CD4	AVI	MOUSE	2-35	IgG2b	PURIFIED	0.25mg	C,F,IP	MCA2164	Q
CD4	AVI	MOUSE	2-35	IgG2b	FITC	0.1mg	F	MCA2164F	Q
CD4	AVI	MOUSE	2-35	IgG2b	RPE	100 TESTS	F	MCA2164PE	T
CD4	OVI	MOUSE	44.38	IgG2a	PURIFIED	0.25mg	C,F,IP	MCA2213	N
CD4	OVI	MOUSE	44.38	IgG2a	FITC	0.1mg	F	MCA2213F	Q
CD4	OVI	MOUSE	44.38	IgG2a	RPE	100 TESTS	F	MCA2213PE	T
CD4	OVI	MOUSE	44.97	IgG1	FITC	0.1mg	F	MCA2214F	Q
CD4	CAV	MOUSE	CT7	IgG1	CON S/N	0.25ml	C,F	MCA749S	N
CD4/CD8	CAN	RAT	YKIX302.9/YCATE55.9	IgG2a/IgG1	FITC/RPE	100 TESTS	F	DC048	Q
CD5	AVI	MOUSE	2-176	IgG1	PURIFIED	0.25mg	C,F,IP	MCA2165	Q
CD5	AVI	MOUSE	2.176	IgG1	FITC	0.1mg	F	MCA2165F	Q
CD5	AVI	MOUSE	2-176	IgG1	RPE	100 TESTS	F	MCA2165PE	T

VETERINARY REAGENTS continued

Specificity	Target Species	Host	Clone	Isotype	Format	Quantity	Applications	Product Code	Price Code
CD5	BOV	MOUSE	CC17	IgG1	ALEXA FLUOR® 647	100 TESTS	F	MCA835A647	T
CD5	BOV	MOUSE	CC17	IgG1	FITC	0.1mg	F	MCA835F	Q
CD5	BOV	MOUSE	CC17	IgG1	PURIFIED	0.25mg	C,F,IP	MCA835G	N
CD5	BOV	MOUSE	CC17	IgG1	S/N	2.0ml	C,F,IP	MCA835S	N
CD8	CAN	RAT	YCATE55.9	IgG1	ALEXA FLUOR® 647	100 TESTS	F	MCA1039A647	S
CD8	BOV	MOUSE	CC63	IgG2a	ALEXA FLUOR® 647	100 TESTS	F	MCA837A647	S
CD8a	AVI	MOUSE	11-39	IgG1	PURIFIED	0.25mg	F,IP	MCA2166	Q
CD8a	AVI	MOUSE	11-39	IgG1	FITC	0.1mg	F	MCA2166F	Q
CD8a	AVI	MOUSE	11-39	IgG1	RPE	0.1mg	F	MCA2166PE	T
CD11a	OVI	MOUSE	72.87	IgG2a	PURIFIED	0.25mg	F	MCA2217	N
CD11a	OVI	MOUSE	72.87	IgG2a	FITC	0.1mg	F	MCA2217F	Q
CD28	AVI	MOUSE	2-4	IgG2a	PURIFIED	0.25mg	C,F,IP	MCA2167	Q
CD28	AVI	MOUSE	2-4	IgG2a	FITC	0.1mg	F	MCA2167F	Q
CD28	AVI	MOUSE	2-4	IgG2a	RPE	100 TESTS	F	MCA2167PE	T
CD41/CD61	AVI	MOUSE	11C3	IgG1	PURIFIED	0.25mg	F,IF,IP	MCA2240	Q
CD41/CD61	AVI	MOUSE	11C3	IgG1	FITC	0.1mg	F	MCA2240F	Q
CD44	OVI	MOUSE	25.32	IgG1	PURIFIED	0.25mg	C,F,IP	MCA2219	N
CD44	OVI	MOUSE	25.32	IgG1	FITC	0.1mg	F	MCA2219F	Q
CD45	CAN	RAT	YKIX716.13	IgG2b	ALEXA FLUOR® 647	100 TESTS	F	MCA1042A647	S
CD45	CAN	RAT	YKIX716.13	IgG2b	APC	100 TESTS	F	MCA1042APC	T
CD45	OVI	MOUSE	1.11.32	IgG1	PURIFIED	0.25mg	C,F,IP	MCA2220	N
CD45	OVI	MOUSE	1.11.32	IgG1	FITC	0.1mg	F	MCA2220F	Q
CD45	OVI	MOUSE	1.11.32	IgG1	RPE	100 TESTS	F	MCA2220PE	T
CD45R	OVI	MOUSE	20.96	IgG1	PURIFIED	0.25mg	C,F,IP	MCA2221	N
CD45R	OVI	MOUSE	20.96	IgG1	FITC	0.1mg	F	MCA2221F	Q
CD46	POR	MOUSE	JM6C11	IgG1	PURIFIED	0.25mg	F	MCA2262	P
CD58	OVI	MOUSE	L180/1	IgG1	RPE	0.1mg	F	MCA1499PE	T
CD61	POR	MOUSE	JM2E5	IgG1	PURIFIED	0.25mg	C,F,IP,WB	MCA2263	P
CD61	POR	MOUSE	JM2E5	IgG1	FITC	0.1mg	F	MCA2263F	Q
BOVINE IgG					PURIFIED	10mg		PBP002	E
BOVINE IgG1					PURIFIED	1.0mg		PBP003	J
BOVINE IgG2					PURIFIED	1.0mg		PBP004	J
EQUINE IgG					PURIFIED	10mg		PEP001	E
FELINE IgG					PURIFIED	10mg		PFP001	E
GOAT IgG					PURIFIED	10mg		PCP001	E
PORCINE IgG					PURIFIED	10mg		PPP012	E
SHEEP IgM	OVI	MOUSE	25.69	IgG1	PURIFIED	0.25mg	F	MCA2223	N
SHEEP IgM	OVI	MOUSE	25.69	IgG1	FITC	0.1mg	F	MCA2223F	Q
IL-10	BOV	MOUSE	CC320	IgG1	AZIDE FREE	0.5mg	E,FN	MCA2111Z	S
IL-12	BOV	MOUSE	CC326	IgG2b	BIOTIN	0.25mg	E,F*	MCA2173B	Q
IL-12	BOV	MOUSE	CC326	IgG2b	AZIDE FREE	0.5mg	E,F*,FN	MCA2173Z	S
MHC CLASS I	OVI	MOUSE	41.17	IgG1	PURIFIED	0.25mg	C,F,IP	MCA2224	N
MHC CLASS I	OVI	MOUSE	41.17	IgG1	FITC	0.1mg	F	MCA2224F	Q
MHC CLASS II	AVI	MOUSE	21-1A6	IgG1	PURIFIED	0.25mg	C,F,IP	MCA2171	Q
MHC CLASS II	AVI	MOUSE	21-1A6	IgG1	FITC	0.1mg	F	MCA2171F	Q
MHC CLASS II	AVI	MOUSE	21-1A6	IgG1	RPE	100 TESTS	F	MCA2171PE	T
MHC CLASS II DQ	OVI	MOUSE	38.27	IgG1	PURIFIED	0.25mg	C,IP,F	MCA2227	N
MHC CLASS II DQ	OVI	MOUSE	38.27	IgG1	FITC	0.1mg	F	MCA2227F	Q
MHC CLASS II DQ/DR	OVI	MOUSE	28.1	IgG1	PURIFIED	0.25mg	C,IP,F	MCA2225	N
MHC CLASS II DQ/DR	OVI	MOUSE	28.1	IgG1	FITC	0.1mg	F	MCA2225F	Q
MHC CLASS II DQ/DR	OVI	MOUSE	28.1	IgG1	RPE	100 TESTS	F	MCA2225PE	T
MHC CLASS II DR	OVI	MOUSE	37.68	IgG2a	PURIFIED	0.25mg	C,IP,F	MCA2226	N
MHC CLASS II DR	OVI	MOUSE	37.68	IgG2a	FITC	0.1mg	F	MCA2226F	Q
SLA 1	POR	MOUSE	JM1E3	IgG1	PURIFIED	0.25mg	F,IP	MCA2261	P
SLA 1	POR	MOUSE	JM1E3	IgG1	FITC	0.1mg	F	MCA2261F	Q
SWC9	POR	MOUSE	PM 18-7	IgG1	PURIFIED	0.2mg	C,F,IP	MCA1973	S
SWC9	POR	MOUSE	PM 18-7	IgG1	FITC	0.1mg	F	MCA1973F	T
T1	AVI	MOUSE	RR5-89	IgG2b	PURIFIED	0.25mg	F	MCA2168	Q
T1	AVI	MOUSE	RR5-89	IgG2b	FITC	0.1mg	F	MCA2168F	Q
WC1	OVI	MOUSE	19.19	IgG1	PURIFIED	0.25mg	C,F,IP	MCA2222	N
WC1	OVI	MOUSE	19.19	IgG1	FITC	0.1mg	F	MCA2222F	Q

ACCESSORY REAGENTS

Specificity	Target Species	Host	Clone	Isotype	Format	Quantity	Applications	Product Code	Price Code
ELISA DILUENT RABBIT					5 X CONCENTRATE	100ml	E	BUF040A	N
ELISA GENERAL BUFFER					READY TO USE	100ml	E	BUF037A	C
ELISA IgM REDUCING BUFFER					READY TO USE	100ml	E	BUF038A	E
ELISA NEPTUNE BUFFER					READY TO USE	100ml	E	BUF039A	E

ACCESSORY REAGENTS

Specificity	Target Species	Host	Clone	Isotype	Format	Quantity	Applications	Product Code	Price Code	
ELISA WASH BUFFER						CONCENTRATED	100ml	E	BUF031A	B
ELISA WASH BUFFER						CONCENTRATED	500ml	E	BUF031B	H
ELISA WASH BUFFER						CONCENTRATED	1000ml	E	BUF031C	J
FIV-p24	VIR		MOUSE	PAK3-2C1	IgG1	PURIFIED	0.25mg	C,E,F*,P*,WB	MCA2278	P
GOAT F(ab')^2 IgG NEGATIVE CONTROL			GOAT			FITC	0.7mg	F	STAR118F	J
GOAT F(ab')^2 IgG NEGATIVE CONTROL			GOAT			RPE	0.1mg	F	STAR118PE	L
IgG2a:FITC/IgG2a:RPE NEGATIVE CONTROL			RAT		IgG2a/IgG2a	FITC/RPE	100 TESTS	F	DC036	Q
MOUSE IgG1 NEGATIVE CONTROL			MOUSE		IgG1	ALEXA FLUOR® 488	100 TESTS	F	MCA1209A488	N
MOUSE IgG1 NEGATIVE CONTROL			MOUSE		IgG1	ALEXA FLUOR® 405	100 TESTS	F	MCA928A405	L
MOUSE IgG1 NEGATIVE CONTROL			MOUSE		IgG1	ALEXA FLUOR® 488	100 TESTS	F	MCA928A488	P
MOUSE IgG1 NEGATIVE CONTROL			MOUSE		IgG1	ALEXA FLUOR® 647	100 TESTS	F	MCA928A647	P
MOUSE IgG1:FITC/IgG1:RPE NEGATIVE CONTROL			MOUSE		IgG1/IgG1	FITC/RPE	100 TESTS	F	DC045	Q
MOUSE IgG1a NEGATIVE CONTROL			MOUSE		IgG1a	ALEXA FLUOR® 647	100 TESTS	F	MCA1209A647	N
MOUSE IgG2a NEGATIVE CONTROL			MOUSE		IgG2a	ALEXA FLUOR® 488	100 TESTS	F	MCA1210A488	N
MOUSE IgG2a NEGATIVE CONTROL			MOUSE		IgG2a	ALEXA FLUOR® 647	100 TESTS	F	MCA1210A647	N
MOUSE IgG2a NEGATIVE CONTROL			MOUSE		IgG2b	ALEXA FLUOR® 488	100 TESTS	F	MCA929A488	P
MOUSE IgG2a NEGATIVE CONTROL			MOUSE		IgG2a	ALEXA FLUOR® 647	100 TESTS	F	MCA929A647	P
MOUSE IgG2b NEGATIVE CONTROL			MOUSE		IgG2b	ALEXA FLUOR® 405	100 TESTS	F	MCA691A405	L
MOUSE IgG2b NEGATIVE CONTROL			MOUSE		IgG2b	ALEXA FLUOR® 488	100 TESTS	F	MCA691A488	P
MOUSE IgG2b NEGATIVE CONTROL			MOUSE		IgG2b	ALEXA FLUOR® 647	100 TESTS	F	MCA691A647	P
MOUSE IgG3 NEGATIVE CONTROL			MOUSE		IgG3	ALEXA FLUOR® 647	100 TESTS	F	MCA2063A647	P
OVALBUMIN			MOUSE	2C6	IgE	PURIFIED	0.1mg	E	MCA2259	I
RAT IgG1 NEGATIVE CONTROL			RAT		IgG1	ALEXA FLUOR® 488	100 TESTS	F	MCA1211A488	L
RAT IgG2a NEGATIVE CONTROL			RAT		IgG2a	ALEXA FLUOR® 488	100 TESTS	F	MCA1212A488	L
RAT IgG2b NEGATIVE CONTROL			RAT		IgG2b	ALEXA FLUOR® 488	100 TESTS	F	MCA1125A488	P
RAT IgG2b NEGATIVE CONTROL			RAT		IgG2b	ALEXA FLUOR® 647	100 TESTS	F	MCA1125A647	L
SIMIAN VIRUS 5	VIR	MOUSE		SV5-Pk1	IgG2a	PURIFIED	0.25mg	IF	MCA2324	N
SIMIAN VIRUS 5	VIR	MOUSE		SV5-Pk1	IgG2a	FITC	0.1mg	IF	MCA2324F	P

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Applications Key

C	Cryostat sections
F	Flow cytometry
ID	Immunodiffusion
FN	Functional studies
E	ELISA
P	Paraffin sections
H	Haemagglutination
IP	Immunoprecipitation
WB	Western blotting
R	Radioimmunoassay
*	Requires special Conditions, see datasheet

Abbreviations

APC - Allophycocyanin conjugate
Azide Free - Preservative free
HRP - Horseradish peroxidase conjugate
FITC - Fluorescein isothiocyanate conjugate
RPE - R. Phycoerythrin conjugate

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Published by Serotec Ltd. 22 Bankside, Station Approach, Kidlington, OX5 1JE, UK

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