

AVAILABLE REAGENTS FOR CATTLE

Index:

- I. Recombinant cytokines and chemokines
- II. Monoclonal antibodies to:
 - Cell surface molecules
 - Cytokines and chemokines
- III. Cross-reactive anti-human mAbs

I. Recombinant proteins

Cytokine & chemokines	Details about reagent (made in)	Source	Catalogue # (or other reference)
GM-CSF	Mammalian cells (COS or 293T)	UK BBSRC Toolkit Project	www.immunologicaltoolbox.co.uk
IFN- α G	CHO cells	UK BBSRC Toolkit Project	www.immunologicaltoolbox.co.uk
IFN- γ	<i>Pichia pastoris</i>	Pierce-Endogen	RBOIFNG1
IFN- γ	<i>E. coli</i>	R&D Systems	2300-BG-025, 2300-BG-025/CF
IFN-tau	<i>E. coli</i>	Cell Sciences	CR2058
IFN-tau	<i>E. coli</i>	Pierce-Endogen	discontinued
IFN-tau	<i>Pichia pastoris</i>	US Biologicals	17662-15H
IFN-tau	<i>E. coli</i>	PBL	19610-1
IL-1 β	<i>Pichia pastoris</i>	Pierce-Endogen	RBOIL1B1
IL-2	<i>E. coli</i>	R&D Systems	2465-BL-020, 2465-BL-020/CF
IL-2	Mammalian cells (COS or 293T)	UK BBSRC Toolkit Project	www.immunologicaltoolbox.co.uk
IL-4	<i>Pichia pastoris</i>	Pierce-Endogen	RBOIL41
IL-4	<i>E. coli</i>	R&D Systems	2469-BL-025, 2465-BL-025/CF
IL-4	Mammalian cells (COS or 293T)	UK BBSRC Toolkit Project	www.immunologicaltoolbox.co.uk
IL-5	Mouse myeloma	R&D Systems	2525-BL-025, 2525-BL-025/CF
IL-6	Mammalian cells (COS or 293T)	UK BBSRC Toolkit Project	www.immunologicaltoolbox.co.uk
IL-10	Mammalian cells (COS or 293T)	UK BBSRC Toolkit Project	www.immunologicaltoolbox.co.uk
IL-12	Mammalian cells (COS or 293T)	UK BBSRC Toolkit Project	www.immunologicaltoolbox.co.uk
TNF α	<i>Pichia pastoris</i>	Pierce-Endogen	RBOTNFA1
TNF α	<i>E. coli</i>	R&D Systems	2279-BT-025, 2279-BT-025/CF

II. Monoclonal antibodies

Antibody To:	Details of reagent	Source	Clone # (mAbclonals)
mAb TO CELL SURFACE MOLECULES			
CD1	mAb	Acris	20.27
CD1	mAb	Serotec	20.27
CD1	mAb	Affinity	20.27
CD1	mAb	Accurate	20.27
CD1	mAb	European Collection	20.27
CD1	mAb	European Collection	AFRCIAH-CC14
CD1	mAb	Acris	CC13
CD1	mAb	Accurate	CC13
CD1	mAb	Affinity	CC14
CD1	mAb	Accurate	TH97A
CD1	mAb	Raybiotech	
CD1b	mAb	VMRD	TH97A
CD1	mAb	European Collection	AFRCIAH-CC20
CD1	mAb	European Collection	AFRCIAH-CC13
CD1w2	mAb	US Bio	7E105
CD1w2	mAb	Acris	CC13
CD1w2	mAb	Novus	CC13
CD1w2	mAb	Serotec	CC13
CD1w2	mAb	Affinity	CC20
CD1w2	mAb	Genway	CC20
CD1w2	mAb	Accurate	CC14
CD1w2	mAb	Affinity	CC14
CD1w3	mAb	Accurate	CC43
CD1w3	mAb	Serotec	CC43
CD2	mAb	Acris	CC42
CD2	mAb	Affinity	CC42
CD2	mAb	Accurate	CC42
CD2	mAb	Affinity	CC42
CD2	mAb	European Collection	CC42
CD2	mAb	Accurate	16-1E10
CD2	mAb	VMRD	16-1E10
CD2	mAb	Accurate	8-1E3
CD2	mAb	VMRD	8-1E3
CD2	mAb	Accurate	B26A4
CD2	mAb	VMRD	B26A4
CD2	mAb	Accurate	BAQ95A
CD2	mAb	VMRD	BAQ95A
CD2	mAb	Accurate	CH128A

CD2	mAb	VMRD	CH128A
CD2	mAb	Accurate	MUC2A
CD2	mAb	VMRD	MUC2A
CD2	mAb	American Type	ILA42
CD2	mAb	European Collection	ILA42
CD2	mAb	European Collection	AFRCIAH-CC42
CD2	mAb	European Collection	ILA43
CD2	mAb	European Collection	CC42
CD3	mAb	Accurate	MM1A
CD3	mAb	VMRD	MM1A
CD3	Whole antiserum	Sigma	
CD3	pAb	Biocare Med	
CD3	pAb	GeneTex	
CD4	mAb	Accurate	IL-A11
CD4	mAb	VMRD	IL-A11
CD4	mAb	American Type	ILA11
CD4	mAb	European Collection	ILA11
CD4	mAb	European Collection	AFRCIAH-CC30
CD4	mAb	European Collection	AFRCIAH-CC8
CD4	mAb	Acris	CC8
CD4	mAb	Affinity	CC8
CD4	mAb	European Collection	CC8
CD4	mAb	Novus	CC8
CD4	mAb	Serotec	CC8
CD4	mAb	Acris	CC30
CD4	mAb	Affinity	CC30
CD4	mAb	Novus	CC30
CD4	mAb	Serotec	CC30
CD4	mAb	VMRD	CACT138A
CD4	mAb	VMRD	CACT83B
CD4	mAb	VMRD	GC50A1
CD4	mAb	Abcam	MAC387
CD5	mAb	Acris	CC17
CD5	mAb	Affinity	CC17
CD5	mAb	Novus	CC17
CD5	mAb	Serotec	CC17
CD5	mAb	Affinity	CC17
CD5	mAb	Accurate	CC17
CD5	mAb	Accurate	B29A
CD5	mAb	Accurate	CACT105A
CD5	mAb	VMRD	CACT105A
CD5	mAb	European Collection	AFRCIAH-CC17
CD5	mAb	European Collection	AFRCIAH-CC29
CD5	mAb	Univ Melbourne Vet	79.5

CD5	mAb	VMRD	9G12
CD6	mAb	Accurate	BAQ82A
CD6	mAb	VMRD	BAQ82A
CD6	mAb	Accurate	BAQ91A
CD6	mAb	VMRD	BAQ91A
CD6	mAb	Accurate	CC38
CD6	mAb	Serotec	CC38
CD6	mAb	European Collection	ILA57
CD6	mAb	European Collection	AFRCIAH-CC38
CD8	mAb	Abcam	MAC387
CD8	mAb	Accurate	CC63
CD8	mAb	Serotec	CC63
CD8	mAb	Accurate	38.65
CD8	mAb	Affinity	38.65
CD8	mAb	Genway	38.65
CD8	mAb	Serotec	38.65
CD8	mAb	European Collection	AFRCIAH-CC58
CD8	mAb	European Collection	AFRCIAH-CC63
CD8	mAb	European Collection	ILA51
CD8	mAb	European Collection	ILA105
CD8 α	mAb	Accurate	BAQ111A
CD8 α	mAb	VMRD	BAQ111A
CD8 α	mAb	Accurate	CACT80C
CD8 α	mAb	VMRD	CACT80C
CD8 α	mAb	Serotec	CC63
CD8 β	mAb	Abcam	CC58
CD8 β	mAb	Acris	CC58
CD8 β	mAb	Accurate	CC58
CD8 β	mAb	Affinity	CC58
CD8 β	mAb	European Collection	CC58
CD8 β	mAb	Novus	CC58
CD8 β	mAb	Serotec	CC58
CD8 α	mAb	Accurate	BAT82A
CD8 α	mAb	VMRD	BAT82A
CD9	mAb	Exbio	IVA50
CD11a	mAb	Serotec	BL1H8
CD11a	mAb	Serotec	72.87
CD11a	mAb	Affinity	72.87
CD11a	mAb	Accurate	72.87
CD11a	mAb	Affinity	IL-A99
CD11a	mAb	Serotec	IL-A99
CD11a/CD18	mAb	Accurate	BAT75A
CD11a/CD18	mAb	Accurate	MUC76A
CD11a	mAb	VMRD	MUC76A
CD11b	mAb	Serotec	CA16.3E10

CD11b	mAb	Accurate	CA16.3E10
CD11b	mAb	Accurate	BAQ147A
CD11b	mAb	VMRD	BAQ147A
CD11b	mAb	Accurate	CC126
CD11b	mAb	Serotec	CC126
CD11b	mAb	Accurate	MM10A
CD11b	mAb	VMRD	MM10A
CD11b	mAb	Accurate	MM12A
CD11b	mAb	VMRD	MM12A
CD11b	mAb	European Collection	IAH-CC94
CD11b	mAb	European Collection	IAH-CC104
CD11c	mAb	Accurate	BAQ153A
CD11c	mAb	VMRD	BAQ153A
CD11c	mAb	European Collection	ILA16
CD13	mAb	Acris	CC81
CD13	mAb	Affinity	CC81
CD13	mAb	Genway	CC81
CD13	mAb	Serotec	CC81
CD14	mAb	Acris	TÜK4
CD14	mAb	Accurate	TÜK4
CD14	mAb	GeneTex	TÜK4
CD14	mAb	Genway	TÜK4
CD14	mAb	Serotec	TÜK4
CD14	mAb	Accurate	CAM36A
CD14	mAb	VMRD	CAM36A
CD14	mAb	Accurate	MM61A
CD14	mAb	VMRD	MM61A
CD14	mAb	US Biological	3H501
CD14	mAb	US Biological	6D250
CD14	mAb	Abcam	501
CD14	mAb	Serotec	CCG33
CD18	mAb	Accurate	CA1.4E9
CD18	mAb	Affinity	CA1.4E9
CD18	mAb	Genway	CA1.4E9
CD18	mAb	Serotec	CA1.4E9
CD18	mAb	Acris	IVA35
CD18	mAb	Affinity	IVA35
CD18	mAb	BioVendor	IVA35
CD18	mAb	European Collection	IVA35
CD18	mAb	Exbio	IVA35
CD18	mAb	GeneTex	IVA35
CD18	mAb	Novus	IVA35
CD18	mAb	Accurate	BAG30A
CD18	mAb	VMRD	BAG30A
CD18	mAb	VMRD	BAT75A

CD20	mAb	Affinity	MEM-97
CD21	mAb	Affinity	LT21
CD21	mAb	Accurate	BAQ15A
CD21	mAb	VMRD	BAQ15A
CD29	mAb	Accurate	GB25A
CD21	mAb	VMRD	GB25A
CD21	mAb	Accurate	CC21
CD21	mAb	Serotec	CC21
CD25 (IL-2R)	mAb	Affinity	IL-A111
CD25 (IL-2R)	mAb	Novus	IL-A111
CD25 (IL-2R)	mAb	Serotec	IL-A111
CD25 (IL-2R)	mAb	Accurate	CACT108A
CD25 (IL-2R)	mAb	VMRD	CACT108A
CD25 (IL-2R)	mAb	Accurate	CACT116A
CD25 (IL-2R)	mAb	VMRD	CACT116A
CD25 (IL-2R)	mAb	Accurate	LCTB2A
CD25 (IL-2R)	mAb	VMRD	LCTB2A
CD26	mAb	Acris	CC69
CD26	mAb	Genway	CC69
CD26	mAb	Novus	CC69
CD26	mAb	Serotec	CC69
CD26	mAb	Affinity	CC69
CD26	mAb	Accurate	CAC114A
CD26	mAb	VMRD	CAC114A
CD26	mAb	US Biological	7E110
CD26	mAb	Raybiotech	Conj w/2 ^o Ab; no clone # provided
CD29	mAb	Accurate	FW4-101
CD29	mAb	VMRD	FW4-101
CD31	mAb	Accurate	CO.3E1D4
CD31	mAb	Affinity	CO.3E1D4
CD31	mAb	Serotec	CO.3E1D4
CD31	mAb	US Biological	6A279
CD34	mAb	US Biological	5J300
CD36	pAb	Lifespan	
CD40	pAb	Assay Design	
CD40	pAb	GeneTex	
CD41	mAb	Novus	CO.35E4
CD41	mAb	VMRD	CAPP2A
CD41/61	mAb	Affinity	CO.35E4
CD41/61	mAb	Genway	CO.35E4
CD41/61	mAb	Serotec	CO.35E4
CD41/CD61	mAb	Acris	IVA30
CD41/CD61	mAb	BioVendor	IVA30
CD41/CD61	mAb	Exbio	IVA30
CD41/CD61	mAb	Novus	IVA30

CD43	mAb	Affinity	CO.44B8
CD43	mAb	Novus	CO.44B8
CD44	mAb	Accurate	MAC329
CD44	mAb	Affinity	MAC329
CD44	mAb	Serotec	MAC329
CD44	mAb	Calbiochem	A020
CD44	mAb	Millipore	A020
CD44	mAb	Abcam	IM7
CD44	mAb	Affinity	IM7
CD44	mAb	BD Pharmingen	IM7
CD44	mAb	BioVendor	IM7
CD44	mAb	GeneTex	IM7
CD44	mAb	Novus	IM7
CD44	mAb	US Biological	1.BB.674
CD44	mAb	VMRD	BAG40A
CD44	mAb	VMRD	BAT31A
CD44	mAb	Invitrogen	3C12
CD44	mAb	Affinity	25.32
CD44	mAb	Serotec	25.32
CD44v3	pAb	Calbiochem	
CD44v3	pAb	US Biological	
CD44v6	pAb	Calbiochem	
CD44v6	pAb	US Biological	
CD44v7	pAb	Millipore	
CD44v7	pAb	US Biological	
CD44v10	pAb	Calbiochem	
CD44v10	pAb	Millipore	
CD44v10	pAb	US Biological	
CD44S	mAb	Affinity	1.11.32
CD44S	mAb	Serotec	1.11.32
CD44S	mAb	US Biological	2Q1374
CD44S	mAb	Acris	CC1
CD44S	mAb	Affinity	CC1
CD44S	mAb	Novus	CC1
CD44S	mAb	Serotec	CC1
CD45	mAb	European Collection	IAH-CC1
CD45	mAb	VMRD	CACTB51A
CD45	mAb	Serotec	CC76
CD45R	mAb	Accurate	GS5A
CD45R	mAb	VMRD	GS5A
CD45R	mAb	European Collection	IAH-CC76a
CD45R	mAb	European Collection	IVA103
CD45R	mAb	Exbio	IVA103
CD45R	mAb	GeneTex	IVA103
CD45R	mAb	VMRD	GC6A

CD45R	mAb	VMRD	LCT27A
CD45R	mAb	VMRD	LCT2A
CD45RB	mAb	VMRD	DH16A
CD45RO	mAb	VMRD	GC42A1
CD45RO	mAb	VMRD	GC44A
CD45RO	mAb	VMRD	IL-A116
CD47	mAb	Abcam	BRIC 126
CD47	mAb	Acris	BRIC 126
CD47	mAb	Affinity	BRIC 126
CD47	mAb	Cell Science	BRIC 126
CD47	mAb	GeneTex	BRIC 126
CD47	mAb	Genway	BRIC 126
CD47	mAb	Serotec	BRIC 126
CD47	mAb	US Biological	3H1456
CD47	mAb	VMRD	TH17A
CD49c	pAb	Millipore	
CD49c	pAb	US Biological	
CD49d	mAb	Abcam	HP2/1
CD49d	mAb	Acris	HP2/1
CD49d	mAb	Genway	HP2/1
CD49d	mAb	Millipore	HP2/1
CD49d	mAb	Accurate	HP2/1
CD49d	mAb	VMRD	FW3-218
CD49e	mAb	US Biological	3H1509
CD49e	mAb	Acris	SAM-1
CD49e	pAb	Millipore	
CD49e	pAb	US Biological	
CD49f	mAb	Abcam	GoH3
CD49f	mAb	Novus	GoH3
CD49f	mAb	R&D Systems	GoH3
CD51/CD61	mAb	Accurate	A 10-33/1
CD51/CD61	mAb	Lifespan	2Q880
CD51/CD61	mAb	Millipore	LM609
CD54	mAb	Acris	MEM-111
CD54	mAb	Accurate	MEM-111
CD54	mAb	Affinity	MEM-111
CD54	mAb	BioVendor	MEM-111
CD54 (ICAM1)	mAb	GeneTex	MEM-111
CD54	mAb	Novus	MEM-111
CD54	mAb	US Biological	6D279
CD61	mAb	Serotec	JM2E5
CD61	mAb	Accurate	JM2E5
D62E	pAb	US Biological	
CD62L	mAb	Serotec	FMC46
CD62L	mAb	Affinity	FMC46

CD62L	mAb	GeneTex	FMC46
CD62L	mAb	Genway	FMC46
CD62L	mAb	Acris	IVA94
CD62L	mAb	Affinity	IVA94
CD62L	mAb	BioVendor	IVA94
CD62L	mAb	Exbio	IVA94
CD62L	mAb	Genway	IVA94
CD62L	mAb	Novus	IVA94
CD62L	mAb	Accurate	BAQ92A
CD62L	mAb	VMRD	BAQ92A
CD62L	mAb	Acris	CC32
CD62L	mAb	Accurate	CC32
CD62L	mAb	Serotec	CC32
CD62L	mAb	Accurate	DUI-29
CD62L	mAb	VMRD	DUI-29
CD62L	mAb	European Collection	IAH-CC32
CD62L	mAb	Exbio	IVA94
CD62L	mAb	Novus	FITC.FMC46
CD62L	mAb	US Biological	3H1611
CD62P	mAb	Acris	Psel.KO.2.7
CD62P	mAb	Genway	Psel.KO.2.7
CD62P	mAb	Serotec	Psel.KO.2.7
CD62P	pAb	BD Bioscience	
CD63	mAb	Acris	CC25
CD63	mAb	Accurate	CC25
CD63	mAb	Serotec	CC25
CD79a	mAb	Serotec	HM57
CD100	mAb	Accurate	A8
CD120a (TNF receptor 1)	mAb	Acris	Clone # not provided
CD120a (TNF receptor 1)	pAb	Abcam	
CD120a (TNF receptor 1)	pAb	Acris	
CD120a (TNF receptor 1)	pAb	Assay Designs	
CD120a (TNF receptor 1)	pAb	Biovision	
CD120a (TNF receptor 1)	pAb	Calbiochem	
CD120a (TNF receptor 1)	pAb	GeneTex	
CD120a (TNF receptor 1)	pAb	US Biological	
CD143	mAb	Millipore	2E2

CD143	mAb	Serotec	2E2
CD143	mAb	GeneTex	2E2
CD143	mAb	GeneTex	3C5
CD143	mAb	Genway	3C5
CD143	mAb	Leica	3C5
CD143	mAb	Serotec	3C5
CD143	mAb	Genway	200
CD144	mAb	Acris	Clone # not provided
CD144	pAb	Serotec	
CD144	pAb	Affinity	
CD144	pAb	GeneTex	
CD144	pAb	US Biological	
CD172a	mAb	Affinity	CC149
CD172a	mAb	Genway	CC149
CD172a	mAb	Novus	CC149
CD172a	mAb	Serotec	CC149
CD172a	mAb	Raybiotech	Conj w/2 ^o Ab; no clone # provided
CD172a	mAb	Accurate	DH59B
CD172a	mAb	VMRD	DH59B
CD172a	mAb	VMRD	74-22-15A
CD205	mAb	Acris	CC98
CD205	mAb	Affinity	CC98
CD205	mAb	Genway	CC98
CD205	mAb	Novus	CC98
CD205	mAb	Serotec	CC98
CD205	mAb	Raybiotech	Conj w/2 ^o Ab; no clone # provided
CD222	mAb	US Biological	6D548
CD230	mAb	Affinity	5121
CD230	mAb	Acris	7D9
CD230	mAb	Affinity	7D9
CD230	mAb	Accurate	7D9
CD230	mAb	GeneTex	7D9
CD230	mAb	Genway	7D9
CD230	mAb	US Biological	6D685
CD230	mAb	US Biological	6D686
CD230	mAb	US Biological	6D687
CD230	mAb	US Biological	5E412
CD230	mAb	Acris	F89/160.1.5
CD230	mAb	Acris	BDI115
CD230	pAb	Affinity	
CD230	pAb	Lifespan	
CD230	pAb	Serotec	
CD230	pAb	US Biological	
CD282	mAb	Biolegend	TL2.1
CD335	mAb	Acris	AKS1

CD335	mAb	Accurate	AKS1
CD335	mAb	Affinity	AKS1
CD335	mAb	Genway	AKS1
CD335	mAb	Novus	AKS1
CD335	mAb	Serotec	AKS1
CD335	mAb	Raybiotech	Conj w/2 ^o Ab; no clone # provided
CXCR4	pAb	GenWay	
CXCR4	pAb	Lifespan	
CXCR4	pAb	Prosci	
IFN γ Receptor	pAb	Phosphosolutions	
HLA (A,B,C)	mAb	BD Pharmingen	G46-2.6
HLA (D,P,Q)	mAb	BD Pharmingen	Tu39
HLA (DR)	mAb	BD Pharmingen	Tu36
MHC I	mAb	VMRD	H58A
MHC II	mAb	VMRD	H42A
WC1-N1 (pan leuko)	mAb	VMRD	B7A1
WC1-N11 (pan leuko cluster)	mAb	VMRD	BAQ167A
WC1-N11 (pan leuko subpop)	mAb	VMRD	BAQ90A
WC1-N2 (pan leuko)	mAb	VMRD	BAQ4A
WC1-N22 (pan leuko)	mAb	VMRD	CACTB31A
WC1-N25 (pan leuko)	mAb	VMRD	GB54A
WC1-N26 (pan leuko)	mAb	VMRD	GB45A
WC1-N3 ($\gamma\delta$ T lympho subpop)	mAb	VMRD	CACTB32A
WC1-N3 (pan leuko cluster)	mAb	VMRD	BAQ72A
WC1-N44 (pan leuko cluster)	mAb	VMRD	BAG25A
WC1-N4 (pan leuko cluster)	mAb	VMRD	BAQ159A
WC1-N4 (pan leuko subpop)	mAb	Accurate	BAQ89A
WC4 (CD19-like)	mAb	Accurate	CC55
WC7-N1	mAb	VMRD	TH18A
WC14	mAb	Serotec	BT 3/8.12

mAb TO CYTOKINES AND CHEMOKINES

CCL2	DuoSet hMCP-1 for ELISA	R&D Systems	
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GM-CSF	mAb	Accurate	CC305
GM-CSF	mAb	Affinity	CC305
GM-CSF	mAb	GeneTex	CC305
GM-CSF	mAb	Genway	CC305
GM-CSF	mAb	Serotec	CC305 (pair with Serotec clone 3C2 for ELISA)
GM-CSF	mAb	Accurate	GM-CSF17.2
GM-CSF	mAb	VMRD	GM-CSF 17.2
GM-CSF	mAb	Accurate	GM-CSF 201.1
GM-CSF	mAb	VMRD	GM-CSF 201.1
GM-CSF	mAb	Lifespan	3H2169
GM-CSF	mAb	US Biological	3H2169
GM-CSF	mAb	Affinity	3C2
GM-CSF	mAb	Serotec	3C2
GM-CSF	mAb	Raybiotech	Conj w/2 ^o Ab; no clone # provided
GM-CSF	pAb	Accurate	
GM-CSF	pAb	Immundiagnostik	
IgA	mAb	VMRD	Big312D3
IgG (H&L)	pAb	Abcam	
IgG (H&L)	pAb	Accurate	
IgG (H&L)	pAb	GeneTex	
IgG (H&L)	pAb	Genway	
IgG (H&L)	pAb	Jackson	
IgG (H&L)	pAb	Midland	
IgG (H&L)	pAb	US Biologicals	
IgG (spec)	pAb	Abcam	
IgG	mAb	Accurate	BG18
IgG	pAb	Abcam	
IgG	pAb	Accurate	
IgG	pAb	Affinity	
IgG	pAb	Genway	
IgG	pAb	Serotec	
IgG	pAb	US Biologicals	
IgG (Light)	mAb	Exbio	IVA285-1
IgG2	mAb	Abcam	BG2-7
IgG2	pAb	Genway	
IgG, IgA, IgM	mAb	Serotec	K67 3G2
IgG1	mAb	Accurate	K372G6
IgG1	mAb	Accurate	LO-BG-1
IgG1	mAb	Accurate	LO-BG-2
IgG1	mAb	Serotec	K67 2G6
IgG1	mAb	Accurate	Big715A
IgG1	mAb	VMRD	Big715A
IgG1	pAb	Accurate	
IgG1	pAb	Bethyl Labs	

IgG1	pAb	Genway	
IgG1	pAb	US Biologicals	
IgG1	pAb	VMRD	
IgG2	mAb	Accurate	K1924F10
IgG2	mAb	Accurate	LO-BG-1
IgG2	mAb	Accurate	BG2-7
IgG2	pAb	Accurate	
IgG2	pAb	Bethyl Labs	
IgG2	pAb	Serotec	
IgG2	pAb	US Biologicals	
IgG2	pAb	VMRD	
IgK (light chain)	mAb	VMRD	Big43A
IgM	mAb	VMRD	Pig45A
IFN α 1	pAb	Immundiagnostik	
IFN γ	mAb	Accurate	CC302
IFN γ	mAb	Endogen	CC302
IFN γ	mAb	Serotec	CC302 (pair with Serotec clone CC330 for ELISA)
IFN γ	mAb	Pierce-Endogen	MBOIFNG
IFN γ	mAb	R&D Systems	345025
IFN γ	mAb	MAbtech	PAN
IFN γ	mAb	MAbtech	bIFNg-1
IFN γ	mAb	Lifespan	Clone # not provided
IFN- γ	pAb	Accurate	
IFN γ	pAb	Immundiagnostik	
IFN γ	pAb	Pierce-Endogen	
IFN γ	pAb	R&D Systems	
IFN γ	Pairs for ELISA	ExactAntigen	
IFN γ	Pairs for ELISA	Invitrogen	
IFN γ	Pairs for ELISA	Prionics	
IFN γ	pairs for ELISA	UK BBSRC Toolkit Project	www.immunologicaltoolbox.co.uk/ (pairs are Serotec clones CC302 & CC330)
IFN- τ	mAb	Pierce-Endogen	MN1010
IL-1 β	mAb	Affinity	1D4
IL-1 β	mAb	Accurate	1D4
IL-1 β	mAb	GeneTex	1D4
IL-1 β	mAb	Genway	1D4
IL-1 β	mAb	Millipore	1D4
IL-1 β	mAb	Serotec	1D4
IL-1 β	mAb	US Biological	3H2506
IL-1 β	mAb	Accurate	IL-1 8.1

IL-1 β	mAb	VMRD	IL-1 8.1
IL-1 β	mAb	Accurate	IL-1 9.3
IL-1 β	mAb	VMRD	IL-1 9.3
IL-1 β	mAb	Univ Melbourne Vet	10.82
IL-1 β	mAb	American Type	SA22
IL-1 β	pAb	Abcam	
IL-1 β	pAb	Genway	
IL-1 β	pAb	Lifespan	
IL-1 β	pAb	US Biological	
IL-2	mAb	Accurate	IL-2 14.1
IL-2	mAb	VMRD	IL-2 14.1
IL-2	mAb	Accurate	IL-2 19.2
IL-2	mAb	VMRD	IL-2 19.2
IL-2	mAb	GeneTex	1E10
IL-2	pAb	Immundiagnostik	
IL-2	pAb	R&D Systems	
IL-4	mAb	Accurate	CC303
IL-4	mAb	Serotec	CC303
IL-4	mAb	Affinity	CC313
IL-4	mAb	Genway	CC313
IL-4	mAb	Serotec	CC313 (pair with Serotec CC314 for ELISA)
IL-4	mAb	Affinity	CC314
IL-4	mAb	Genway	CC314
IL-4	mAb	Novus	CC314
IL-4	mAb	Serotec	CC314
IL-4	mAb	Endogen	MBOIL4
IL-4	mAb	Raybiotech	Conj w/2 ^o Ab; no clone # provided
IL-4	pAb	Endogen	
IL-4	pAb	R&D Systems	
IL-6	mAb	GeneTex	4B6
IL-6	mAb	Serotec	CC310
IL-6	pAb	Affinity	
IL-6	pAb	Serotec	
IL-8	mAb	US Biological	3H2547
IL-8	mAb	Affinity	8M6
IL-8	mAb	Accurate	8M6
IL-8	mAb	GeneTex	8M6
IL-8	mAb	Millipore	8M6
IL-8	mAb	Serotec	8M6
IL-10	mAb	Affinity	CC320
IL-10	mAb	Accurate	CC320
IL-10	mAb	Novus	CC320
IL-10	mAb	Serotec	CC320
IL-10	mAb	Serotec	CC318

IL-10	mAb	Raybiotech	Conj w/2° Ab; no clone # provided
IL-12	mAb	Serotec	CC301 (pair with Serotec clone CC326 for ELISA)
IL-12	mAb	Accurate	CC326
IL-12	mAb	Serotec	CC326
TNF α	mAb	Abcam	CC327
TNF α	mAb	Accurate	CC327
TNF α	mAb	Genway	CC327
TNF α	mAb	Serotec	CC327
TNF α	mAb	Abcam	CC328
TNF α	mAb	Accurate	CC328
TNF α	mAb	Genway	CC328
TNF α	mAb	Serotec	CC328
TNF α	mAb	Pierce-Endogen	MBOTNFA1
TNF α	mAb	Raybiotech	Conj w/2° Ab; no clone # provided
TNF α	pAb	Abcam	
TNF α	pAb	CytoCen	
TNF α	pAb	Genway	
TNF α	pAb	Lifespan	
TNF α	pAb	Pierce-Endogen	
TNF α	pAb	R&D Systems	
TNF α	pAb	US BiologicalS	
TNF α	Pairs for ELISA	UK BBSRC Toolkit Project	Serotec clones CC327 and CC328

IV. Anti-human mAbs that cross-react with bovine molecules

See: Sopp, P, D Werling and C Baldwin. 2007. Cross-reactivity of mAbs to human CD antigens with cells from cattle. *Veterinary Immunology & Immunopathology* 119:106-14.

CD molecule	mAb Clone	Supplier	% of sub-population stained with anti-CD mAb indicated in column 1				Overall assessment
			% of CD2 ⁺	% of WC1 ⁺	% of CD21 ⁺	% of CD14 ⁺	
CD1a	B17.20.9	Coulter	3.4	6.6	39.5	40.4	P
CD9	RH1A	VMRD	7.9	60.1	19.1	89.5	+
CD9	LT86A	VMRD	12.7	66.2	43.8	90.3	+
CD9	MM2/57	AbD Serotec	8.6	61.2	15.9	78.8	+
CD10	SN5c	AbD Serotec	2.6	2.9	8.0	13.7	A
CD10	ALB1	Coulter	NT	NT	NT	NT	P
CD11a	HUH73A	VMRD	74.9	69.6	54.6	98.7	+
CD14	CAM36A	VMRD	2.4	2.5	9.3	92.4	+
CD14	TÜK4	Dako	1.4	2.8	7.6	92.0	+
CD14	M5E2	BD Pharmin	1.2	3.5	7.6	87.9	+

CD16	3G8	Coulter	0.9	2.5	3.8	4.1	-
CD18	BAQ30A	VMRD	67.0	85.1	78.0	99.5	+
CD18	H20A	VMRD	50.0	52.0	63.7	99.4	+
CD18	7E4	Coulter	36.8	41.9	66.3	98.2	+
CD18	MHM23	Dako	88.9	87.7	79.8	99.6	+
CD21	LB21	AbD Serotec	3.6	6.4	91.1	5.4	+
CD21	BL13	Coulter	3.1	7.2	87.9	5.2	P
CD22	Mc64-12	AbD Serotec	4.0	4.9	43.9	9.3	+
CD23	9P.25	Coulter	2.7	5.8	49.2	20.7	+
CD25	B1.49.9	Coulter	2.7	6.3	23.1	41.2	?
CD27	LT27	AbD Serotec	4.3	6.6	38.3	22.9	?
CD28	YTH913.12	AbD Serotec	1.4	9.2	8.0	8.9	-
CD29	3S3	AbD Serotec	10.7	9.9	13.2	36.0	P
CD29	K20	Dako	33.2	16.1	21.5	72.9	+
CD32	AT10	AbD Serotec	9.5	7.3	11.2	33.5	A
CD32	2 E1	Coulter	3.5	5.7	42.5	49.2	P
CD44	BAG40A	VMRD	92.2	91.4	57.9	98.7	+
CD44	LT41A	VMRD	83.4	96.3	40.9	95.5	+
CD45	DH16A	VMRD	55.8	30.0	19.8	19.9	+
CD47	HUH69A	VMRD	99.8	98.8	99.8	99.9	+
CD47	HUH71A	VMRD	99.9	99.9	100.0	99.9	+
CD49d	HP2/1	Coulter	59.9	58.8	76.9	95.9	+
CD49d	P4G9	Dako	38.3	31.8	37.6	61.3	+
CD49d	9F10	BD Pharmin	44.4	40.5	58.3	89.2	+
CD51/61	23C6	AbD Serotec	1.1	2.3	4.0	3.5	?
CD59	MUC93A	VMRD	1.0	2.5	4.6	3.3	P
CD61	PM6/13	AbD Serotec	2.1	3.5	6.3	5.5	?
CD61	Y2/51	Dako	2.2	4.9	5.8	4.1	?
CD62L	FMC46	Dako	52.8	90.0	48.2	91.6	P
CD 62P	AK-6	Dako	1.6	3.7	7.1	5.6	?
CD69	TP1.55.3	Coulter	2.3	4.6	10.6	4.0	-
CD88	S5/1	AbD Serotec	29.9	15.5	65.1	80.5	A
CD88	W17/1	AbD Serotec	47.0	74.5	22.9	76.0	A
CD119	BB1E2	AbD Serotec	23.1	6.4	82.8	78.5	+
CD120a	H398	AbD Serotec	1.3	2.5	4.6	3.9	-
CD163	Ber-MAC3	Dako	1.5	3.7	6.7	78.2	+
CD165	AD2-13H12	AbD Serotec	3.6	4.9	38.7	16.6	A
CD166	3A6	AbD Serotec	4.4	3.5	6.7	25.8	?
CD172a	DH59B	VMRD	2.6	4.8	30.4	97.6	+
CD200	MRC-OX-104	AbD Serotec	3.7	3.5	12.2	2.8	A/P
CD230		AbD Serotec					
CD236R	Ret40f	Dako	1.3	3.4	6.0	3.2	-
CD247	G3	AbD Serotec	1.8	2.5	5.5	1.9	-

IgG controls Antibody	Dako	Dako	<1.9	<4.2	<6.2	<3.3	Negative control for flow cytometry
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+ = stained cattle cells

- = no reaction

A = atypical staining pattern compared to humans

P = may recognise a polymorphic determinant

? = insufficient evidence to make a conclusion