

Custom Conjugated Antibodies

Express Service

Features

- A wide choice for multicolor panel creation
- Short turnaround times
- Greater affordability from small minimum orders and bulk production
- Quality and dependability from BD Biosciences

Fluorochrome	Fluorescence Emission Color	Em-Max (nm)
BD Horizon™ V450	Blue	448
Pacific Blue™	Blue	452
Alexa Fluor® 488	Green	519
FITC	Green	519
PE	Yellow	578
PE-Texas Red®	Orange	615
Texas Red®	Orange	615
APC	Red	660
Alexa Fluor® 647	Red	668
PE-Cy™5	Red	667
PerCP	Red	678
PerCP-Cy™5.5	Far Red	695
Alexa Fluor® 700	Far Red	719
PE-Cy™7	Infrared	785
APC-Cy7	Infrared	785
BD APC-H7	Infrared	785

Figure 1. Fluorochromes available for custom antibody conjugation*

* Custom biotin-conjugated antibodies are also available.

To request a quote, email BDCustomOrders@bd.com or contact your account manager.

BD custom services provide personalized solutions designed to supply researchers with the widest choice of tools to support their studies. As a recognized leader in multicolor flow cytometry, BD's custom product offerings include antibody conjugates, multicolor cocktails, and assay services delivered by scientists with deep expertise in multicolor flow cytometry and multiplexed protein assay development. BD custom products are backed by customer care delivered by highly-qualified BD technical and application support personnel.

Express Conjugation Service

With fast turnaround times and small minimum orders, the Express Conjugation Service delivers affordable custom antibody conjugates that help researchers quickly build unique multicolor flow cytometry panels to expand their research. A wide selection of 16 fluorochromes across 250 of BD Pharmingen's most popular antibody clones provides options to meet specific multicolor experimental design requirements. Small (0.5 mg) order minimums make the development of a custom antibody conjugate more affordable and allow tight budgets to go further. A typical three week turnaround time makes multicolor panel expansion fast and removes bottlenecks to downstream work.

Expertise in Cell Analysis Products and Services

For more than 25 years, researchers have depended on BD Biosciences to deliver high-quality, multicolor conjugated antibodies for the reliable isolation and analysis of a variety of cell types. BD custom antibody conjugation products and services allow researchers to continuously build on this foundation, expanding their multicolor flow cytometry experiments into new areas of discovery.

For researchers requiring custom conjugates of antibody specificities not offered by the Express Conjugation Service, full access to the BD Pharmingen portfolio of antibodies is available through a standard service with quantities and lead times that vary by format. Additionally, BD offers a test-ready conjugation service using our portfolio of RUO-GMP reagents to provide research and clinical labs with custom antibody conjugates that can be quickly and reliably incorporated into laboratory protocols.

For comprehensive services, including multicolor tools for immunophenotyping and immune function testing, assay development, contract manufacturing, and assay services, BD's Custom Technology Team works as an extension of a client's team to provide state-of-the-art tools to advance discovery and development programs.

Visit bdbiosciences.com for more information.



Antibody specificities and clones available from the Express Conjugation Service

Human

Specificity	Clone
Human CD1a	H1149
Human CD1d	CD1d42
Human CD2	RPA-2.10
Human CD3	HIT3a
Human CD3	UCHT1
Human CD4	M-T477
Human CD4	RPA-T4
Human CD5	UCHT2
Human CD7	M-T701
Human CD8	RPA-T8
Human CD10	H110A
Human CD11b (Mac-1)	ICRF44
Human CD11c (Integrin α_c)	B-ly6
Human CD13	WM15
Human CD14	M5E2
Human CD15	HI98
Human CD15s (Sialyl Lewis x)	CSLEX1
Human CD16	3G8
Human CD19	HIB19
Human CD20	2H7
Human CD20	H1
Human CD21	B-ly4
Human CD23	M-L233
Human CD24 (Heat Stable Antigen)	ML5
Human CD25 (IL-2R α)	M-A251
Human CD27	M-T271
Human CD28	CD28.2
Human CD29 (Integrin β_1)	MAR4
Human CD31 (PECAM-1)	WM59
Human CD32 (Fc γ RII)	3D3
Human CD33	HIM3-4
Human CD33	WM53
Human CD34	563
Human CD34	581
Human CD36	CB38
Human CD38	HIT2
Human CD40	5C3
Human CD41a	HIP8
Human CD42a	ALMA.16
Human CD42b	HIP1
Human CD43 (Leukosialin)	1G10
Human CD44	515
Human CD44	G44-26
Human CD45	HI30
Human CD45	TU116
Human CD45RA	5H9
Human CD45RA	H1100
Human CD45RO	UCHL1
Human CD49d (Integrin α_x)	9F10

Specificity	Clone
Human CD49e (Integrin α_x)	IIA1
Human CD49e (Integrin α_x)	VC5
Human CD49f (Integrin α_x)	GOH3
Human CD54 (ICAM-1)	HA58
Human CD55 (DAF)	IA10
Human CD56 (N-CAM)	B159
Human CD57	NK-1
Human CD59	p282(H19)
Human CD61 (Integrin β_2)	VI-PL2
Human CD62L (L-selectin)	DREG-56
Human CD62P (P-selectin)	AK-4
Human CD63	H5C6
Human CD64	10.1
Human CD66B (CEA)	G10F5
Human CD68	Y1/82A
Human CD69 (Very Early Activation Antigen)	FN50
Human CD70	Ki-24
Human CD71 (Transferrin Receptor)	M-A712
Human CD73 (Ecto-5'-nucleotidase)	AD2
Human CD79b (Ig β)	CB3-1
Human CD80 (B7-1)	BB1
Human CD80 (B7-1)	L307.4
Human CD81 (TAPA-1)	JS-81
Human CD83	HB15e
Human CD86 (B7-2)	2331(FUN-1)
Human CD86 (B7-2)	IT2.2
Human CD90 (Thy-1)	5E10
Human CD95 (Fas/APO-1)	DX2
Human CD106 (VCAM-1)	51-10C9
Human CD107a (LAMP-1)	H4A3
Human CD107b (LAMP-2)	H4B4
Human CD117 (c-kit)	YB5.B8
Human CD122 (IL-2R β)	Mik- β 3
Human CD123 (IL-3R α)	7G3
Human CD123 (IL-3R α)	9F5
Human CD126 (IL-6R α)	M5
Human CD127 (IL-7R α)	hIL-7R-M21
Human CD132 (common γ chain)	TUGh4
Human CD137 (4-1BB)	4B4-1
Human CD138 (Syndecan-1)	M115
Human CD146	P1H12
Human CD152 (CTLA-4)	BNI3
Human CD154 (CD40L)	TRAP1
Human CD166	3A6
Human CD178 (Fas Ligand, CD95 Ligand)	NOK-1
Human CD183 (CXCR3)	1C6/CXCR3
Human CD184 (CXCR4)	12G5
Human CD191 (CCR1)	53504
Human CD194 (CCR4)	1G1.1

Specificity	Clone
Human CD195 (CCR5)	2D7/CCR5
Human CD195 (CCR5)	3A9
Human CD197 (CCR7)	2H4
Human CD197 (CCR7)	3D12
Human CD209 (DC-SIGN)	DCN46
Human CD221 (IGF-IR α)	1H7
Human CD235a (Glycophorin A)	GA-R2
Human CD278 (ICOS)	DX29
Human CD279 (PD-1)	MIH4
Human Cutaneous Lymphocyte Antigen (CLA)	HECA-452
Human HLA-A2	BB7.2
Human HLA-ABC	G46-2.6
Human HLA-DR	G46-6
Human HLA-DR	TU36
Human HLA-DR,DP,DQ	TU39
Human IFN- γ	4S.B3
Human IFN- γ	B27
Human IFN- γ	NIB42
Human Ig, κ light chain	G20-193
Human Ig, λ light chain	JCD-12
Human IgD	IA6-2
Human IgG	G18-145
Human IgM	G20-127
Human IL-10	JES3-19F1
Human IL-10	JES3-9D7
Human IL-12 (p70)	C8.6
Human IL-12 (p70)	20C2
Human IL-13	JES10-5A2
Human IL-2	5344.111
Human IL-2	MQ1-17H12
Human IL-4	8D4-8
Human IL-4	MP4-25D2
Human IL-5	TRFK5
Human IL-6	MQ2-13A5
Human IL-8	G265-5
Human Integrin β_1	FIB504
Human Invariant NK-T Cell	6B11
Human Ki-67	B56
Human MIP-1 β	D21-1351
Human MLH1	G168-728
Human NGF Receptor	C40-1457
Human NKG2D	1D11
Human Perforin	δ G9
Human TNF	MAB1
Human TNF	MAB11
Human V δ 2 TCR	B6
Human $\alpha\beta$ TCR	T10B9.1A-31
Human $\gamma\delta$ TCR	B1
BrdU	3D4

Non-Human Primate

Specificity	Clone	Reactivity
Human CD3	SP34-2	Bab, Cyno, Rhe
Human CD4	L200	Bab, Cyno, Rhe
Human CD11b (Mac-1)	ICRF44	Bab, Cyno, Rhe
Human CD21	B-ly4	Bab, Cyno, Rhe
Human CD25 (IL-2R α)	M-A251	Bab, Cyno, Rhe
Human CD40	5C3	Bab, Cyno, Rhe
Non-Human Primate CD45	D058-1283	Bab, Cyno, Rhe
Human CD59	p282(H19)	Bab, Cyno, Rhe
Human CD95 (Fas/APO-1)	DX2	Bab, Cyno, Rhe
Human CD154 (CD40L)	TRAP1	Bab, Cyno, Rhe
Human CD183 (CXCR3)	1C6/CXCR3	Bab, Cyno, Rhe
Human CD184 (CXCR4)	12G5	Bab, Cyno, Rhe
Human CD195 (CCR5)	3A9	Cyno, Rhe
Human IFN- γ	4S.B3	Bab, Cyno, Rhe
Human IFN- γ	B27	Bab, Cyno, Rhe
Human IL-2	MQ1-17H12	Bab, Cyno, Rhe
Human IL-4	8D4-8	Cyno, Rhe
Human TNF	MAB11	Bab, Cyno, Rhe
BrdU	3D4	-

Rat

Specificity	Clone
Rat CD3	1F4
Rat CD3	G4.18
Rat CD4	OX-35
Rat CD8a	OX-8
Rat CD11b (Mac-1)	WT.5
Rat CD29 (Integrin β_1)	Ha2/5
Rat CD31 (PECAM-1)	TLD-3A12
Rat CD32 (Fc γ II receptor)	D34-485
Rat CD45 (Leukocyte Common Antigen)	OX-1
Rat CD90	OX-7
BrdU	3D4

Antibody specificities and clones available from the Express Conjugation Service

Mouse

Specificity	Clone
Mouse CD3 Molecular Complex	17A2
Mouse CD3e	145-2C11
Mouse CD4	GK1.5
Mouse CD4	H129.19
Mouse CD4	RM4-4
Mouse CD4	RM4-5
Mouse CD5	53-7.3
Mouse CD8a	53-6.7
Mouse CD8b.2	53-5.8
Mouse CD11a (Integrin α_4)	M17/4
Mouse CD11b (Integrin α_{M} , Mac-1)	M1/70
Mouse CD11c (Integrin α_x)	HL3
Mouse CD14	rmC5-3
Mouse CD16/CD32 (Fc γ III/II Receptor)	2.4G2
Mouse CD19	1D3
Mouse CD21/CD35 (CR2/CR1)	7G6
Mouse CD23 (FceRII)	B3B4
Mouse CD24 (Heat Stable Antigen)	M1/69
Mouse CD25 (IL-2R α)	3C7
Mouse CD25 (IL-2R α)	7D4
Mouse CD25 (IL-2R α)	PC61
Mouse CD27	LG.3A10
Mouse CD28	37.51
Mouse CD31 (PECAM-1)	13.3
Mouse CD40	3/23
Mouse CD40	HM40-3
Mouse CD41 (Integrin α_{IIb})	MWRReg30
Mouse CD43 (Ly-48, Leukosialin)	S7
Mouse CD44	IM7
Mouse CD45 (Leukocyte Common Antigen)	30-F11
Mouse CD45.1	A20
Mouse CD45.2	104
Mouse CD45R/B220	RA3-6B2
Mouse CD45RB	16A
Mouse CD49b/Pan-NK Cells	DX5
Mouse CD49d (Integrin α_4)	R1-2
Mouse CD54 (ICAM-1)	3E2
Mouse CD61 (Integrin β_2)	2C9.G2

Specificity	Clone
Mouse CD62L (L-selectin)	MEL-14
Mouse CD62P (P-selectin)	RB40.34
Mouse CD69 (Very Early Activation Antigen)	H1.2F3
Mouse CD71 (Transferrin Receptor)	C2
Mouse CD80 (B7-1)	16-10A1
Mouse CD86 (B7-2)	GL-1
Mouse CD90.1 (Thy-1.1)	OX-7
Mouse CD90.2 (Thy-1.2)	53-2.1
Mouse CD95 (Fas, APO-1)	Jo2
Mouse CD102 (ICAM-2)	3C4(MIC2/4)
Mouse CD103 (Integrin α_{E})	M290
Mouse CD106 (VCAM-1)	429(MVCAM.A)
Mouse CD107a (LAMP-1)	1D4B
Mouse CD107b (LAMP-2)	ABL-93
Mouse CD117 (c-kit)	2B8
Mouse CD117 (c-kit)	ACK45
Mouse CD122 (IL-2/IL-15R β)	TM- β 1
Mouse CD124 (IL-4R α)	mIL4R-M1
Mouse CD127 (IL-7R α)	SB/199
Mouse CD135 (Flk-2/Flt3)	A2F10.1
Mouse CD138 (Syndecan-1)	281-2
Mouse CD144 (VE-Cadherin)	11D4.1
Mouse CD152 (CTLA-4)	9H10
Mouse CD152 (CTLA-4)	UC10-4F10-11
Mouse CD154 (CD40L)	MR1
Mouse CD178 (Fas Ligand, CD95 Ligand)	MFL3
Mouse CD184 (CXCR4)	2B11/CXCR4
Mouse CD195 (CCR5)	C34-3448
Mouse CD210 (IL-10 Receptor)	1B1.3a
Mouse CD279 (PD-1)	J43
Mouse Erythroid Cells	TER-119
Mouse Flk-1 (VEGF-R2)	Avas12 α 1
Mouse H-2Kb	AF6-88.5
Mouse H-2Kd	SF1-1.1
Mouse I-A/I-E	M5/114.15.2
Mouse I-A/I-E	2G9
Mouse I-Ab	AF6-120.1
Mouse IFN- γ	R4-6A2

Specificity	Clone
Mouse IFN- γ	XMG1.2
Mouse Ig, κ light chain	187.1
Mouse IgD	11-26C.2A
Mouse IgE	R35-72
Mouse IgG $_1$	A85-1
Mouse IgG $_{2a}$	R19-15
Mouse IgM	II/41
Mouse IgM	R6-60.2
Mouse IL-2	S4B6
Mouse IL-2	JES6-1A12
Mouse IL-2	JES6-5H4
Mouse IL-4	11B11
Mouse IL-4	BVD4-1D11
Mouse IL-5	TRFK5
Mouse IL-6	MP5-20F3
Mouse IL-10	JES5-16E3
Mouse IL-10	JES5-2A5
Mouse IL-12 (p40/p70)	C15.6
Mouse IL-12 (p40/p70)	C17.8
Mouse IL-12 (p70)	9A5
Mouse IL-17A	TC11-18H10.1
Mouse LPAM-1 (Integrin $\alpha_4\beta_1$ complex)	DATK32
Mouse Ly-6A/E (Sca-1)	D7
Mouse Ly-6A/E (Sca-1)	E13-161.7
Mouse Ly-6C	AL-21
Mouse Ly-6G	1A8
Mouse Ly-6G and Ly-6C (Gr-1)	RB6-8C5
Mouse Mac-3	M3/84
Mouse NK-1.1	PK136
Mouse T- and B-Cell Antigen	GL7
Mouse TCR β Chain	H57-597
Mouse TNF	G281-2626
Mouse TNF	MP6-XT3
Mouse $\gamma\delta$ TCR	GL3
Mouse V α 2 TCR	B20.1
Mouse V β 3 TCR	KJ25
Mouse V β 5.1, 5.2 TCR	MR9-4
BrdU	3D4

Isotype Controls

Specificity	Clone
Hamster IgG $_{1, \kappa}$ Isotype Control	A19-3
Hamster IgG $_{1, \lambda}$ Isotype Control	G235-2356
Hamster IgM, λ Isotype Control	G235-1
Rat IgG $_{1, \kappa}$ Isotype Control	R3-34
Rat IgG $_{2a, \kappa}$ Isotype Control	R35-95
Rat IgG $_{2b, \kappa}$ Isotype Control	A95-1
Mouse IgG $_{1, \kappa}$ Isotype Control	MOPC-21
Mouse IgG $_{1, \kappa}$ Isotype Control	MOPC-31C
Mouse IgG $_{2a, \kappa}$ Isotype Control	G155-178
Mouse IgG $_{2b, \kappa}$ Isotype Control	27-35
Mouse IgG $_{2c, \kappa}$ Isotype Control	MPC-11

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