

## **CD100 Monoclonal Mouse Antibody (A8)**

	NR	R	
250->			
150->	-		
100→			
75→			2ug loadi
50→		-	NR=Non- reduced
37→			R=reduce
$25 \rightarrow -$ $20 \rightarrow$		-	
15→			

## **Product Description**

CD100 (also known as Semaphorin 4D), is a homodimeric protein comprised of 50 kDa subunits. It is expressed on resting T cells and weakly on other lymphocytes, and its expression is increased on B and T cells after stimulation. CD100 is a cell surface receptor that binds to CD72, Plexin B1 and Plexin B2. It promotes B cell aggregation, cell survival, and cell proliferation.

Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the CF® Dye Brochure for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors.

Stock status: Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email order@biotium.com to inquire about stock status and lead times before placing your order.

Catalog number key for antibody number 0218, CD100 Monoclonal Mouse Antibody (A8)

	357 Email: <u>techsupport@biotium.com</u>		
Product attributes			
Antibody number	#0218		
Antibody reactivity (target)	CD100, Semaphorin-4D		
Antibody type	Primary		
Host species	Mouse		
Clonality	Monoclonal		
Clone	A8		
Isotype	IgG1, kappa		
Molecular weight	50 kDa (Monomer)		
Synonyms	CD100; Semaphorin-4D; SEMA4D		
Human gene symbol	SEMA4D		
Entrez gene ID	10507		
SwissProt	Q92854		
Unigene	494406		
Immunogen	PHA stimulated human peripheral blood lymphocytes.		
Antibody target cellular localization	Plasma membrane		
Species reactivity	Human, Monkey, Mouse		
Expected antibody applications	ELISA (published for clone), Flow, surface (published for clone), WB (published for clone)		
Antibody application notes	Functional studies: Order Ab without azide; Flow cytometry: 0.5-1 ug/million cells; Immunofluorescence: 0.5-1 ug/mL; Optimal dilution for a specific application should be determined.		
Positive control	Daudi, Raji, HUT-78, Kg1a, U937, and human lymphocytes. Human tonsils and lymph nodes.		
Shipping condition	Room temperature		
Storage Conditions	Store at 2 to 8 $^\circ\text{C},$ Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 $^\circ\text{C}$		
Regulatory status	For research use only (RUO)		
Antibody/conjugate formulation	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide		
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended		
Product origin	Product may contain either bovine serum albumin (BSA) from bovine serum (Bos taurus), or recombinant BSA produced in Chinese hamster ovary cells. Inquire for the specific lot.		
Cell/tissue expression	Hematopoietic cells		
Antibody research areas	Immunology, Neuroscience, Signal transduction		

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel	Dye Features
BNC04	CF®405S	404/431	405	DAPI (microscopy), AF405	CF®405S Features
BNC88	CF®488A	490/515	488	GFP, FITC	CF®488A Features
BNC68	CF®568	562/583	532, 561	RFP, TRITC	CF®568 Features
BNC94	CF®594	593/614	561	Texas Red®	CF®594 Features
BNC40	CF®640R	642/662	633-640	Cy®5	CF®640R Features
BNC47	CF®647	650/665	633-640	Cy®5	CF®647 Features
BNC74	CF®740	742/767	633-685	775/50	CF®740 Features
BNCB	Biotin	N/A	N/A	N/A	
BNUB	Purified	N/A	N/A	N/A	
BNUM	Purified, BSA-free	N/A	N/A	N/A	

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## References

Note: References for this clone sold by other suppliers may be listed for expected applications.

- 1. PNAS USA (1996) 93:11780-11785. (Flow)
- 2. PLoS One (2007) 2(9):e818. (Flow, WB, ELISA)

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