

CD98 Monoclonal Mouse Antibody (UM7F8)

Product Description

CD98 exits as a heterodimer containing a disulphide-linked glycosylated heavy chain and a non-glycosylated light chain. It is a member of the solute carrier family and encodes a cell surface, transmembrane protein. The protein exists as the heavy chain of a heterodimer, covalently bound through disulfide bonds to one of several possible light chains. The encoded transporter plays a role in regulation of intracellular calcium levels and transports L-type amino acids. Alternatively spliced transcript variants, encoding different isoforms, have been characterized.

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 <u>CF® Dye Brochure</u> 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 <u>order@biotium.com</u> to inquire about stock status and lead times before placing your order.

Catalog number key for antibody number 0425, Anti-CD98 (UM7F8)

Call us : 800-304-5357 Email: techsupport@biotium.com

Product attributes

Product attributes			
Antibody number	#0425		
Antibody reactivity (target)	CD98		
Antibody type	Primary		
Host species	Mouse		
Clonality	Monoclonal		
Clone	UM7F8		
Isotype	lgG1		
Molecular weight	Heterodimer (125 kDa) made of a disulfide-linked glycosylated heavy chain of approximately 80-90 kDa and a non-glycosylated light chain		
Synonyms	4F2, 4F2HC, 4T2HC, CD98HC; MDU1; NACAE; Slc3a2; Solute Carrier Family 3 (activators of dibasic and neutral amino acid transport) Member 2, E16, LAT1, MPE16, hLAT1		
Human gene symbol	SLC3A2		
Entrez gene ID	6520		
SwissProt	P08195		
Unigene	502769		
Immunogen	Molt 13 T cell line		
Antibody target cellular localization	Plasma membrane		
Expected antibody applications	Flow, surface (published for clone), Functional studies (published for clone), IF (published for clone), IP (published for clone)		
Species reactivity	Human		
Antibody application notes	Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody, Flow Cytometry 0.5-1 ug/million cells/0.1 mL, Immunofluorescence 0.5-1.0 ug/mL, Comitogenic with soluble anti-CD2 and immobilized anti-CD3 mAbs, Optimal dilution for a specific application should be determined by user		
Positive control	HL-60, Jurkat, MG63, HUT-78, K562, YT, U937, Hep-G2 cells, Tonsil		
Shipping condition	Room temperature		
Storage Conditions	Store at 2 to 8 $^{\circ}$ C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 $^{\circ}$ C		
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended		
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		
Antibody research areas	Transporters		
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.		

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.

- Cell Immunol (1994) 154(1):253-63. (IP, Flow, functional studies)
 J Cell Biol (2001) 276(42): 39282-39289. (IF)
 Leukocyte Typing V (S.F. Schlossman, et al, eds.) Oxford University Press, Oxford, (1995) p. 280-283.
 Leukocyte Typing VI (T. Kishimoto, et al, eds.) Garland Publishing, Inc., New York (1997) p. 531-534.

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