

CD98 Monoclonal Mouse Antibody (UM7F8)

Product Description

CD98 exists 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 [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 0425, Anti-CD98 (UM7F8)**

References

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

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

Product attributes

Antibody number	#0425
Antibody reactivity (target)	CD98
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	UM7F8
Isotype	IgG1
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 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °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

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
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	

Alexa Fluor, Pacific Blue, Pacific Orange, and Texas Red are trademarks or registered trademarks of Thermo Fisher Scientific; Cy is a registered trademark of Cytiva; IRDye, LI-COR, LI-COR Bioscience.