ARG55979
anti-CD98 antibody [UM7F8]

Package: 50 µg
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [UM7F8] recognizes CD98
Tested Reactivity	Hu
Tested Application	FACS, FuncSt, ICC/IF
Host	Mouse
Clonality	Monoclonal
Clone	UM7F8
Isotype	IgG1
Target Name	CD98
Species	Human
Immunogen	The Molt-13 T cell line.
Conjugation	Un-conjugated
Alternate Names	MDU1; 4T2HC; CD98; 4F2hc; 4F2 cell-surface antigen heavy chain; CD98HC; 4F2HC; NACAE; Solute carrier family 3 member 2; CD antigen CD98; 4F2 heavy chain antigen; Lymphocyte activation antigen 4F2 large subunit; 4F2

Application Instructions

Application table

Application	Dilution
FACS	0.5 - 1 µg/10^6 cells
FuncSt	Assay-dependent
ICC/IF	0.5 - 1.0 µg/ml

Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

Form	Liquid
Purification	Purification with Protein G.
Buffer	PBS (pH 7.4), 0.05% Sodium azide and 0.1 mg/ml BSA
Preservative	0.05% Sodium azide
Stabilizer	0.1 mg/ml BSA
Concentration	0.2 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed

	before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Database links	GeneID: 6520 Human Swiss-port # P08195 Human
Gene Symbol	SLC3A2
Gene Full Name	solute carrier family 3 (amino acid transporter heavy chain), member 2
Background	This gene 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 di-sulfide 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. [provided by RefSeq, Nov 2010]
Function	Required for the function of light chain amino-acid transporters. Involved in sodium-independent, high-affinity transport of large neutral amino acids such as phenylalanine, tyrosine, leucine, arginine and tryptophan. Involved in guiding and targeting of LAT1 and LAT2 to the plasma membrane. When associated with SLC7A6 or SLC7A7 acts as an arginine/glutamine exchanger, following an antiport mechanism for amino acid transport, influencing arginine release in exchange for extracellular amino acids. Plays a role in nitric oxide synthesis in human umbilical vein endothelial cells (HUVECs) via transport of L-arginine. Required for normal and neoplastic cell growth. When associated with SLC7A5/LAT1, is also involved in the transport of L-DOPA across the blood-brain barrier, and that of thyroid hormones triiodothyronine (T3) and thyroxine (T4) across the cell membrane in tissues such as placenta. Involved in the uptake of methylmercury (MeHg) when administered as the L-cysteine or D,L-homocysteine complexes, and hence plays a role in metal ion homeostasis and toxicity. When associated with SLC7A5 or SLC7A8, involved in the cellular activity of small molecular weight nitrosothiols, via the stereoselective transport of L-nitrosocysteine (L-CNSO) across the transmembrane. Together with ICAM1, regulates the transport activity LAT2 in polarized intestinal cells, by generating and delivering intracellular signals. When associated with SLC7A5, plays an important role in transporting L-leucine from the circulating blood to the retina across the inner blood-retinal barrier. [UniProt]
Calculated Mw	68 kDa
PTM	Phosphorylation on Ser-406; Ser-408 or Ser-410 and on Ser-527 or Ser-531 by ecto-protein kinases favors heterotypic cell-cell interactions.
Cellular Localization	Cell surface, cytoplasmic