

SLC3A2 monoclonal antibody, clone MEM-108 (Biotin)

Catalog # MAB5040 Size 100 ug

Specification	
Product Description	Mouse monoclonal antibody raised against native SLC3A2.
Immunogen	Native purified SLC3A2 from Raji Burkitt's lymphoma cell line.
Host	Mouse
Theoretical MW (kDa)	125
Reactivity	Human
Specificity	This antibody reacts with CD98, a 125 KDa disulfide-linked heterodimer (80 KDa glycosylated heavy chain + 45 KDa non-glykosylated light chain).
Form	Liquid
Conjugation	Biotin
Isotype	lgG1
Recommend Usage	Flow Cytometry (1:200) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS, pH 7.4 (0.09% sodium azide)
Storage Instruction	Store at 4°C. Do not freeze. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

Applications

Flow Cytometry



Gene Info — SLC3A2	
Entrez GenelD	<u>6520</u>
Gene Name	SLC3A2
Gene Alias	4F2, 4F2HC, 4T2HC, CD98, CD98HC, MDU1, NACAE
Gene Description	solute carrier family 3 (activators of dibasic and neutral amino acid transport), member 2
Omim ID	<u>158070</u>
Gene Ontology	<u>Hyperlink</u>
Gene Summary	This gene is a member of the solute carrier family and encodes a cell surface, transmembrane protein with an alpha amylase domain. The protein exists as the heavy chain of a heterodimer, coval ently bound through di-sulfide bonds to one of several possible light chains. It associates with integrins and mediates integrin-dependent signaling related to normal cell growth and tumorigenesis. Alternate transcriptional splice variants, encoding different isoforms, have been characterized. [provided by RefSeq
Other Designations	4F2 cell-surface antigen heavy chain 4F2 heavy chain CD98 heavy chain antigen defined by mono clonal antibody 4F2, heavy chain antigen identified by monoclonal antibodies 4F2, TRA1.10, TRO P4, and T43 heavy chain ymphocyte activation antigen 4F2 large subu

Publication Reference

 Differential effect of cross-linking the CD98 heavy chain on fusion and amino acid transport in the human placental trophoblast (BeWo) cell line.

 ${\sf Dalton\,P,Christian\,HC,Redman\,CW,Sargent\,I\!L,Boyd\,CA.}$

Biochimica et Biophysica Acta 2007 Mar; 1768(3):401.

Application: Flow Cyt, IEM, Human, Human placental trophoblast (BeWo) cell line

• CD98 modulates integrin beta1 function in polarized epithelial cells.

Cai S, Bulus N, Fonseca-Siesser PM, Chen D, Hanks SK, Pozzi A, Zent R.

Journal of Cell Science 2005 Mar; 118(Pt 5):889.

Application: Flow Cyt, Mouse, Immortalized mouse inner medullary collecting duct (IMCD) cells

 CD98-dependent homotypic aggregation is associated with translocation of protein kinase Cdelta and activation of mitogen-activated protein kinases.

Cho JY, Skubitz KM, Katz DR, Chain BM.

Experimental Cell Research 2003 May; 286(1):1.



Disease

- Cardiovascular Diseases
- Diabetes Mellitus
- Edema
- Lymphoma
- Multiple Myeloma