

### **Product datasheet for SM1173P**

#### OriGene Technologies, Inc.

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# CD98 (SLC3A2) Mouse Monoclonal Antibody [Clone ID: 44D7]

**Product data:** 

**Product Type:** Primary Antibodies

Clone Name: 44D7

**Applications:** FC, IHC, IP

**Recommended Dilution:** Flow Cytometry: Use 10 μl of 1/50-1/200 diluted antibody to label 16 cells in 100 μl.

Immunoprecipitation.

Immunohistochemistry on Frozen Sections.

**Immunohistochemistry on Paraffin Sections:** 15 µg/ml.

This CD98/SLC3A2 antibody was validated for use in immunohistochemistry on a panel of 21 formalin-fixed, paraffin-embedded (FFPE) human tissues after heat induced antigen retrieval in pH 6.0 citrate buffer. After incubation with the primary antibody, slides were incubated with biotinylated secondary antibody, followed by alkaline phosphatase-streptavidin and

chromogen.

Reactivity: Human
Host: Mouse
Isotype: IgG1

Clonality: Monoclonal

Immunogen: HOON pre-B leukaemia cell line.

Spleen cells from immunised BALB/c mice were fused with cells of the SP2/0-Ag14 mouse

myeloma cell line.

**Specificity:** This antibody reacts with the heavy chain of the CD98 molecule. This antibody binds to all cell

lines in culture and to activated Tcells.

**Note:** The epitope is distinct from clone 44H7 (SM1173), but the same as recognised by 4F2.

Formulation: PBS

State: Purified

State: Liquid purified IgG fraction Preservative: 0.09% Sodium Azide

**Concentration:** lot specific

**Purification:** Affinity Chromatography on Protein G

**Conjugation:** Unconjugated



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**Storage:** Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.

Avoid repeated freezing and thawing.

Stability:Shelf life: one year from despatch.Gene Name:solute carrier family 3 member 2

Database Link: Entrez Gene 6520 Human

P08195

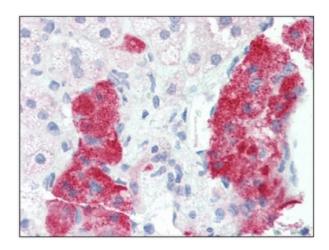
**Background:** CD98 is a type II transmembrane glycoprotein which associates with members of the L-type

amino transporter family to form a heterodimeric complexCD98 constitutes the heavy chain of the complex and is required for the surface expression and basolateral localization of the amino acid transporter complex in polarized epithelial cells. The CD98 heavy chain also interacts with beta 1 integrins and regulates their activation through the cytoplasmic domains and transmembrane regions. Studies suggest that overexpression of CD98 may contribute to cell growth and survival by regulating integrin signalling, and therefore may play an important role in tumorigenesis. The tissue distribution of this antigen is broad. Monocytes express high levels of CD98 antigen. Peripheral blood T and B cells, as well as NK cells and granulocytes express low levels of CD98 antigen. Activation of T cells and NK cells leads to

upregulation of this antigen.

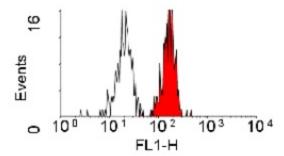
Synonyms: 4F2hc, MDU1

# **Product images:**



Immunohistochemistry: SM1173P/PT CD98 antibody staining of Formalin-Fixed, Paraffin-Embedded Human Adrenal at 15 μg/ml followed by biotinylated anti-Mouse IgG secondary antibody, alkaline phosphatase-streptavidin and chromogen.





**Flow Cytometry:** SM1173P/PTCD98 antibody staining of Human peripheral blood monocytes with using F(ab')2 rabbit anti mouse IgG: FITC ([SP1012F]) as a secondary antibody.