# SANTA CRUZ BIOTECHNOLOGY, INC.

# CD98 (H-300): sc-9160



### BACKGROUND

CD98 (4F2, CD98, MDU1, 4F2HC, 4T2HC, NACAE) is a disulfide-linked heterodimer composed of a glycosylated heavy chain and a non-glycosylated light chain. CD98 is a scaffolding protein that interacts with basolaterally expressed amino acid transporters and  $\beta$ 1 integrins and can alter amino acid transporters and  $\beta$ 1 integrins and can alter amino acid transport and branching morphogenesis. The heavy chain is a type II integral membrane protein. CD98 is expressed on T cells and is upregulated upon T cell activation. CD98 is also present on monocytes and at lower levels on granulocytes, platelets and lymphocytes. Evidence suggests that CD98 may play a role in the regulation of T cell activation and proliferation. Alternate transcriptional splice variants, encoding different isoforms, exist for the human CD98 gene.

## CHROMOSOMAL LOCATION

Genetic locus: SLC3A2 (human) mapping to 11q12.3; Slc3a2 (mouse) mapping to 19 A.

## SOURCE

CD98 (H-300) is a rabbit polyclonal antibody raised against amino acids 230-529 of CD98 of human origin.

#### PRODUCT

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

#### **APPLICATIONS**

CD98 (H-300) is recommended for detection of CD98 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for CD98 siRNA (h): sc-35033, CD98 siRNA (m): sc-35034, CD98 shRNA Plasmid (h): sc-35033-SH, CD98 shRNA Plasmid (m): sc-35034-SH, CD98 shRNA (h) Lentiviral Particles: sc-35033-V and CD98 shRNA (m) Lentiviral Particles: sc-35034-V.

Molecular Weight of CD98: 125 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, HeLa whole cell lysate: sc-2200 or U-937 cell lysate: sc-2239.

#### STORAGE

Store at 4° C, \*\*D0 NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

#### **RESEARCH USE**

For research use only, not for use in diagnostic procedures.

#### DATA



CD98 (H-300): sc-9160. Western blot analysis of CD98 expression in U-937  $({\bm A}),$  HeLa  $({\bm B})$  and Hep G2  $({\bm C})$  whole cell lysates.



CD98 (H-300): sc-9160. Immunofluorescence staining of methanol-fixed U-937 cells showing membrane localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human parathyroid gland tissue showing membrane staining of glandular cells magnification. Kindly provided by The Swedish Human Protein Atlas (IHPA) program (B).

#### SELECT PRODUCT CITATIONS

- 1. Kudo, Y., et al. 2003. Manipulation of CD98 expression affects both trophoblast cell fusion and amino acid transport activity during syncytialization of human placental BeWo cells. J. Physiol. 550: 3-9.
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- Liu, Y., et al. 2011. An immunohistochemical analysis-based decision tree model for estimating the risk of lymphatic metastasis in pN0 squamous cell carcinomas of the lung. Histopathology 59: 882-891.
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