

# CD98 (C-20): sc-7095

## 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 transport and cell adhesion, migration 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.

## SOURCE

CD98 (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of CD98 of human origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-7095 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as phycoerythrin (sc-7095 PE) or fluorescein (sc-7095 FITC) conjugates for flow cytometry, 100 tests.

Available as Alexa Fluor<sup>®</sup> 405 (sc-7095 AF405), Alexa Fluor<sup>®</sup> 488 (sc-7095 AF488) or Alexa Fluor<sup>®</sup> 647 (sc-7095 AF647) conjugates for flow cytometry or immunofluorescence; 100  $\mu$ g/2 ml.

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## APPLICATIONS

CD98 (C-20) is recommended for detection of CD98 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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), flow cytometry (1  $\mu$ g per  $1 \times 10^6$  cells) 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 shRNA Plasmid (h): sc-35033-SH and CD98 shRNA (h) Lentiviral Particles: sc-35033-V.

Molecular Weight of CD98: 125 kDa.

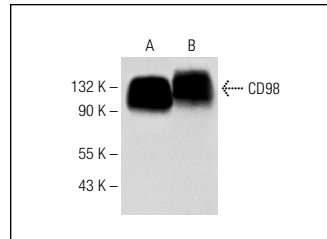
## STORAGE

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

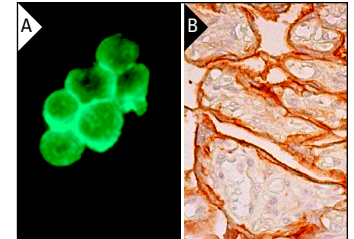
## RESEARCH USE

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

## DATA



CD98 (C-20): sc-7095. Western blot analysis of CD98 expression in U-937 (A) and HL-60 (B) whole cell lysates.



CD98 (C-20): sc-7095. Immunofluorescence staining of methanol-fixed U-937 cells showing membrane localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human placenta tissue showing membrane staining of trophoblastic cells (B).

## SELECT PRODUCT CITATIONS

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- Shames, S.R., et al. 2010. The pathogenic *E. coli* type III effector EspZ interacts with host CD98 and facilitates host cell pro-survival signaling. *Cell. Microbiol.* 12: 1322-1339.
- McNally, A.K., et al. 2011. Foreign body-type multinucleated giant cells induced by interleukin-4 express select lymphocyte co-stimulatory molecules and are phenotypically distinct from osteoclasts and dendritic cells. *Exp. Mol. Pathol.* 91: 673-681.
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