

For Research Use Only

# CD98/SLC3A2 Monoclonal antibody

Catalog Number: 66883-1-Ig **5 Publications**



## Basic Information

<b>Catalog Number:</b> 66883-1-Ig	<b>GenBank Accession Number:</b> BC001061	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 150ul, Concentration: 1700 µg/ml by Nanodrop and 1000 µg/ml by Bradford method using BSA as the standard;	<b>GeneID (NCBI):</b> 6520	<b>CloneNo.:</b> 2B10F5
<b>Source:</b> Mouse	<b>Full Name:</b> solute carrier family 3 (activators of dibasic and neutral amino acid transport), member 2	<b>Recommended Dilutions:</b> WB 1:5000-1:50000 IHC 1:500-1:2000 IF 1:400-1:1600
<b>Isotype:</b> IgG2a	<b>Calculated MW:</b> 68 kDa	
<b>Immunogen Catalog Number:</b> AG7301	<b>Observed MW:</b> 85-94 kDa, 120-130 kDa	

## Applications

**Tested Applications:**  
FC, IF, IHC, WB, ELISA

**Cited Applications:**  
IF, WB

**Species Specificity:**  
Human

**Cited Species:**  
human

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

**Positive Controls:**

**WB:** HeLa cells, MCF-7 cells, HepG2 cells, HT-29 cells, COLO 320 cells, Caco-2 cells, Jurkat cells

**IHC:** human renal cell carcinoma tissue, human colon cancer tissue, human cervical cancer tissue, human liver cancer tissue

**IF:** HeLa cells,

## Background Information

CD98 is a cell-surface heterodimer consisting of a heavy chain (CD98hc) and a light chain. CD98hc also interacts with certain integrin b-subunits to regulate cell migration, survival, proliferation, and adhesion/polarity. CD98hc is overexpressed on the cell surface of many cancers and increased CD98hc expression is associated with the development and progression of tumors. (PMID:25084765). This protein has 4 isoforms with the molecular mass of 58-71 kDa and can be detected 85-94 kDa due to glycosylation. The glycosylated CD98hc can link to a non-glycosylated light chain (~40 kDa) via a disulfide bond to form a heterodimeric CD98 antigen with molecular mass of 120-130 kDa (PMID: 14770309).

## Notable Publications

Author	Pubmed ID	Journal	Application
Shunxi Wang	36229881	Cancer Cell Int	WB
Mathilde Mathieu	34282141	Nat Commun	WB
Eleonora Grisard	35790086	J Extracell Vesicles	WB

## Storage

**Storage:**

Store at -20°C. Stable for one year after shipment.

**Storage Buffer:**

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

**\*\*\* 20ul sizes contain 0.1% BSA**

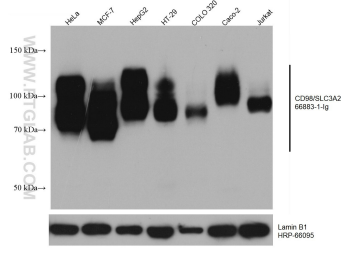
For technical support and original validation data for this product please contact:

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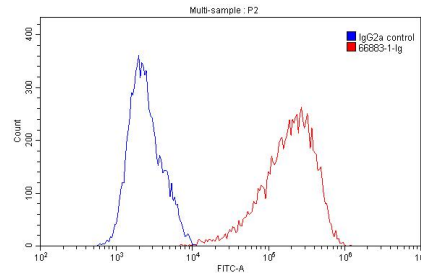
E: proteintech@ptglab.com  
W: ptglab.com

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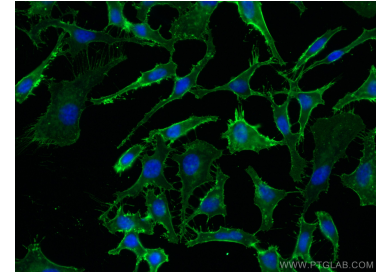
## Selected Validation Data



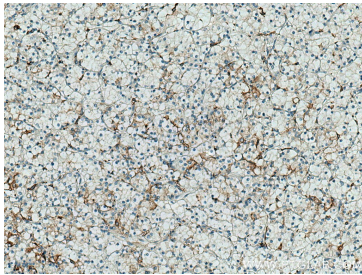
Various lysates were subjected to SDS PAGE followed by western blot with 66883-1-Ig (CD98/SLC3A2 antibody) at dilution of 1:100000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated Lamin B1 Monoclonal antibody (HRP-66095) as loading control.



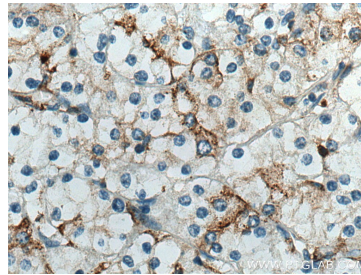
$1 \times 10^6$  HeLa cells were stained with 0.20ug CD98/SLC3A2 antibody (66883-1-Ig, red) and control antibody (blue). Fixed with 90% MeOH.



Immunofluorescent analysis of (-20°C Ethanol) fixed HeLa cells using CD98/SLC3A2 antibody (66883-1-Ig, Clone: 2B10F5) at dilution of 1:800 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



Immunohistochemical analysis of paraffin-embedded human renal cell carcinoma tissue slide using 66883-1-Ig (CD98/SLC3A2 antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human renal cell carcinoma tissue slide using 66883-1-Ig (CD98/SLC3A2 antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).