

Product datasheet

Recombinant Human CD98 protein ab181902

1 Image

Description

<b>Product name</b>	Recombinant Human CD98 protein	
<b>Purity</b>	> 95 % SDS-PAGE.	
<b>Endotoxin level</b>	< 1.000 Eu/μg	
<b>Expression system</b>	HEK 293 cells	
<b>Accession</b>	<a href="#">P08195</a>	
<b>Protein length</b>	Protein fragment	
<b>Animal free</b>	No	
<b>Nature</b>	Recombinant	
<b>Species</b>	Human	
<b>Sequence</b>	RAPRCRELPAQKWWHTGALYRIGDLQAFQGHGAGNLAGL KGRLDYLSSLK VKGLVLGPIHKNQKDDVAQTDLLQIDPNFGSKEDFDSLLQ SAKKKSIRVI LDLTPNYRGENSWFSTQVDTVATKVKDALEFWLQAGVD GFQVRDIENLKD ASSFLAEWQNITKGFSEDRLLIAGTNSSDLQQILSLESNK DLLLTSSYL SDSGSTGEHTKSLVTQYLNATGNRWCSWSLSQARLLTSF LPAQLLRLYQL MLFTLPGTPVFSYGDEIGLDAAALPGQPMEAPVMLWDES SFPDIPGAVSA NMTVKGQSEDPGSLLSLFRRLSDQRSKERSLLHGDFHAF SAGPGLFSYIR HWDQNERFLVVLNFGDVGLSAGLQASDLPASASLPAKA DLLLSTQPGREE GSPLELERLKLEPHEGLLLR FPYAA	
<b>Predicted molecular weight</b>	48 kDa including tags	
<b>Amino acids</b>	206 to 630	
<b>Tags</b>	His tag N-Terminus	
<b>Additional sequence information</b>	Extracellular domain (Accession # AAH01061).	

Specifications

Our [Abpromise guarantee](#) covers the use of **ab181902** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

**Applications** SDS-PAGE

**Form** Lyophilized

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## Preparation and Storage

**Stability and Storage** Shipped at 4°C. Store at 4°C prior to reconstitution. Store at -80°C. Reconstitute for long term storage.

pH: 7.40

Constituents: 95% PBS, 5% Trehalose

**Reconstitution** Reconstitute with sterile deionized water to a concentration of 200 µg/ml.

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## General Info

**Function** Required for the function of light chain amino-acid transporters. Involved in sodium-independent, high-affinity transport of large neutral amino acids such as phenylalanine, tyrosine, leucine, arginine and tryptophan. Involved in guiding and targeting of LAT1 and LAT2 to the plasma membrane. When associated with SLC7A6 or SLC7A7 acts as an arginine/glutamine exchanger, following an antiport mechanism for amino acid transport, influencing arginine release in exchange for extracellular amino acids. Plays a role in nitric oxide synthesis in human umbilical vein endothelial cells (HUVECs) via transport of L-arginine. Required for normal and neoplastic cell growth. When associated with SLC7A5/LAT1, is also involved in the transport of L-DOPA across the blood-brain barrier, and that of thyroid hormones triiodothyronine (T3) and thyroxine (T4) across the cell membrane in tissues such as placenta. Involved in the uptake of methylmercury (MeHg) when administered as the L-cysteine or D,L-homocysteine complexes, and hence plays a role in metal ion homeostasis and toxicity. When associated with SLC7A5 or SLC7A8, involved in the cellular activity of small molecular weight nitrosothiols, via the stereoselective transport of L-nitrosocysteine (L-CNSO) across the transmembrane. Together with ICAM1, regulates the transport activity LAT2 in polarized intestinal cells, by generating and delivering intracellular signals. When associated with SLC7A5, plays an important role in transporting L-leucine from the circulating blood to the retina across the inner blood-retinal barrier.

**Tissue specificity** Expressed ubiquitously in all tissues tested with highest levels detected in kidney, placenta and testis and weakest level in thymus. During gestation, expression in the placenta was significantly stronger at full-term than at the mid-trimester stage. Expressed in HUVECS and at low levels in resting peripheral blood T-lymphocytes and quiescent fibroblasts. Also expressed in fetal liver and in the astrocytic process of primary astrocytic gliomas. Expressed in retinal endothelial cells and in the intestinal epithelial cell line C2BBE1.

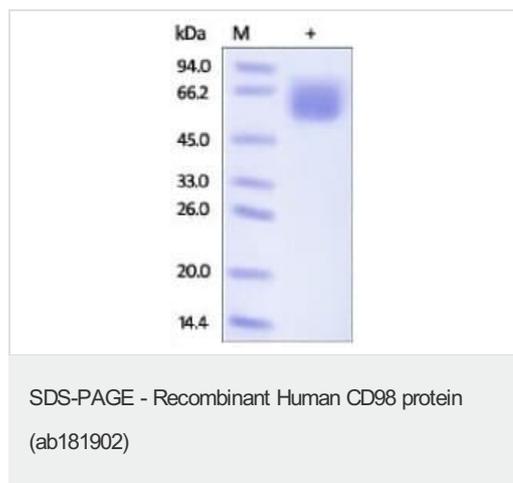
**Sequence similarities** Belongs to the SLC3A transporter family.

**Post-translational modifications** Phosphorylation on Ser-406; Ser-408 or Ser-410 and on Ser-527 or Ser-531 by ecto-protein kinases favors heterotypic cell-cell interactions.

**Cellular localization** Apical cell membrane. Melanosome. Identified by mass spectrometry in melanosome fractions from stage I to stage IV. Localized to the plasma membrane when associated with SLC7A5 or SLC7A8. Localized to the placental apical membrane. Located selectively at cell-cell adhesion sites (By similarity). Colocalized with SLC7A8/LAT2 at the basolateral membrane of kidney proximal tubules and small intestine epithelia. Expressed in both luminal and abluminal membranes of brain capillary endothelial cells (By similarity).

## Images

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DTT-reduced SDS-PAGE analysis of ab181902 staining overnight with Coomassie Blue. The protein migrates as 55-66 kDa under reducing condition (SDS-PAGE) due to glycosylation.

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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