FITC-Labeled CD98 Protein, Human (HEK293, His)

Cat. No.:	HY-P701272
Synonyms:	SLC3A2; CD98; 4F2; 4F2HC; 4T2HC; CD98HC; MDU1; NACAE
Species:	Human
Source:	HEK293
Accession:	P08195 (R206-A630)
Gene ID:	6520
Molecular Weight:	55-66 kDa

PROPERTIES

Appearance	Lyophilized powder.
Formulation	Lyophilized from 0.22 μm filtered solution of PBS, pH7.4. Normally trehalose is added as protectant before lyophilization.
Endotoxin Level	<1 EU/μg, determined by LAL method.
Reconsititution	It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH_2O.
Storage & Stability	Stored at -20°C for 1 year, protect from light. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background	CD98 protein functions as a chaperone that aids in the biogenesis and trafficking of functional transporter heterodimers to the plasma membrane. It forms heterodimers with various SLC7 family transporters, including SLC7A5, SLC7A6, SLC7A7, SLC7A8, SLC7A10, and SLC7A11, acting as amino acid antiporters with substrate specificity determined by the SLC7A subunit. For instance, the heterodimer SLC3A2/SLC7A11 functions as an antiporter by mediating the exchange of extracellular anionic L-cystine and intracellular L-glutamate. Additionally, SLC3A2/SLC7A5, when associated with LAPTM4B, is recruited to lysosomes, promoting leucine uptake and mTORC1 activation. CD98 is essential for plasma membrane localization, stability, and transport activity of various SLC7 transporters. Moreover, it plays a pivotal role in modulating integrin-related signaling, contributing to cell spreading, migration, and tumor progression. In the context of hepatitis C virus (HCV) infection, the SLC3A2 and SLC7A5/LAT1 complex facilitates viral entry into host cells and increases L-leucine uptake, thereby enhancing mTORC1 signaling activation and contributing to HCV-mediated pathogenesis.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA