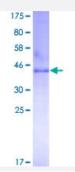


Full-Length

CLDN1 (Human) Recombinant Protein (P01)

Catalog # H00009076-P01 Size 25 ug, 10 ug

Applications



Specification	
Product Description	Human CLDN1 full-length ORF (AAH12471.1, 1 a.a 211 a.a.) recombinant protein with GST-tag at N-terminal.
Sequence	MANAGLQLLGFILAFLGWIGAIVSTALPQWRIYSYAGDNIVTAQAMYEGLWMSCVSQSTGQIQCKV FDSLLNLSSTLQATRALMVVGILLGVIAIFVATVGMKCMKCLEDDEVQKMRMAVIGGAIFLLAGLAIL VATAWYGNRIVQEFYDPMTPVNARYEFGQALFTGWAAASLCLLGGALLCCSCPRKTTSYPTPRPY PKPAPSSGKDYV
Host	Wheat Germ (in vitro)
Theoretical MW (kDa)	48.95
Interspecies Antigen Sequence	Mouse (90); Rat (90)
Preparation Method	in vitro wheat germ expression system
Purification	Glutathione Sepharose 4 Fast Flow
Quality Control Testing	12.5% SDS-PAGE Stained with Coomassie Blue.
Storage Buffer	50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.



Note

Best use within three months from the date of receipt of this protein.

Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

Gene Info — CLDN1	
Entrez GenelD	9076
GeneBank Accession#	BC012471
Protein Accession#	AAH12471.1
Gene Name	CLDN1
Gene Alias	CLD1, ILVASC, SEMP1
Gene Description	claudin 1
Omim ID	603718 607626
Gene Ontology	<u>Hyperlink</u>
Gene Summary	Tight junctions represent one mode of cell-to-cell adhesion in epithelial or endothelial cell sheets, f orming continuous seals around cells and serving as a physical barrier to prevent solutes and wat er from passing freely through the paracellular space. These junctions are comprised of sets of continuous networking strands in the outwardly facing cytoplasmic leaflet, with complementary grooves in the inwardly facing extracytoplasmic leaflet. The protein encoded by this gene, a member of the claudin family, is an integral membrane protein and a component of tight junction strands. Los sof function mutations result in neonatal ichthyosis-sclerosing cholangitis syndrome. [provided by RefSeq
Other Designations	senescence-associated epithelial membrane protein 1

Publication Reference



• Comprehensive exploration of autoantibody in Beh?et's disease: A novel autoantibody to claudin-1, an essential protein for tight junctions, is identified.

Morishima A, Hirano T, Nishikawa H, Nakai K, Sakaguchi S, Kumanogoh A.

Joint, Bone, Spine: Revue Du Rhumatisme 2014 Dec; 81(6):546.

Application: ELISA, Human, Serum

 Identification of putative immunologic targets for colon cancer prevention based on conserved gene expression from pre-invasive to malignant lesions.

Broussard EK, Kim R, Wiley JC, Marquez JP, Annis JE, Pritchard D, Disis ML.

Cancer Prevention Research (Philadelphia, Pa.) 2013 Jul; 6(7):666.

Application: WB, WB-Tr, Human, Serum, HCT116, LoVo, RKO, SW48 cells

Probing Effects of pH change on Dynamic Response of Claudin-2 Mediated Adhesion Using Single Molecule
Force Spectroscopy.

Lim TS, Vedula SR, Huic S, Kausalya PJ, Hunzikerd W, Lim CT.

Experimental Cell Research 2008 Jun; 314(14):2643.

Application: Func, PI, Recombinant protein

 Kinetics of Adhesion Mediated by Extracellular Loops of Claudin-2 as Revealed by Single Molecule Force Spectroscopy.

Lim TS, Vedula SR, Hunziker W, Lim CT.

Journal of Molecular Biology 2008 Jun; 381(3):681.

Application: Func, PI, Recombinant protein

Single-molecular-level study of claudin-1-mediated adhesion.

Lim TS, Vedula SR, Kausalya PJ, Hunziker W, Lim CT.

Langmuir 2007 Dec; 24(2):490.

Application: Func, Recombinant protein

Pathway

- Cell adhesion molecules (CAMs)
- Leukocyte transendothelial migration
- Pathogenic Escherichia coli infection EHEC
- Tight junction



Disease

- Genetic Predisposition to Disease
- Hepatitis C
- Substance Abuse
- Tobacco Use Disorder