

## Recombinant Mouse Cldn5 Protein, His-tagged

Cat. No. Cldn5-795M    Lot. No. (See product label)

### SPECIFICATION

|                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product Overview | Recombinant Mouse Cldn5 Protein (Met1-Glu7+Met29-Arg81+Gln103-Ala123+Arg145-Leu160+Cys182-Val218) with His tag was expressed in E. coli.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Species          | Mouse                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Source           | E.coli                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| ProteinLength    | Met1-Glu7+Met29-Arg81+Gln103-Ala123+Arg145-Leu160+Cys182-Val218                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Description      | <p>This gene encodes a member of the claudin family. Claudins are integral membrane proteins and components of tight junction strands. Tight junction strands serve as a physical barrier to prevent solutes and water from passing freely through the paracellular space between epithelial or endothelial cell sheets, and also play critical roles in maintaining cell polarity and signal transductions. The protein encoded by this gene is a critical component of endothelial tight junctions that control pericellular permeability. The knockout mice lacking this gene died within 10 h of birth and the blood-brain barrier in these mice against small molecules was selectively affected. This gene is expressed strongly in endothelium of normal lung and plays a regulation role during acrolein-induced acute lung injury.</p> |
| Form             | Freeze-dried powder                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Molecular Mass   | Predicted Molecular Mass: 14.7 kDa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Purity           | > 97%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

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|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Applications</b>   | Positive Control; Immunogen; SDS-PAGE; WB.                                                                                                                                                                                                                                                                                                   |
| <b>Stability</b>      | The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37 centigrade for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition. |
| <b>Storage</b>        | Avoid repeated freeze/thaw cycles. Store at 2-8 centigrade for one month. Aliquot and store at -80 centigrade for 12 months.                                                                                                                                                                                                                 |
| <b>Storage Buffer</b> | PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.                                                                                                                                                                                                                                                                      |
| <b>Reconstitution</b> | Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.                                                                                                                                                                                                                                            |

## GENE INFORMATION

|                        |                                                                                                                                                                                |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Gene Name</b>       | Cldn5 claudin 5 [ Mus musculus (house mouse) ]                                                                                                                                 |
| <b>Official Symbol</b> | Cldn5                                                                                                                                                                          |
| <b>Synonyms</b>        | CLDN5; claudin 5; claudin-5; lung-specific membrane protein; transmembrane protein deleted in VCFS; brain endothelial cell clone 1 protein; MBEC1; Tmvcf; AI854493; MGC102088; |
| <b>Gene ID</b>         | 12741                                                                                                                                                                          |
| <b>mRNA Refseq</b>     | NM_013805                                                                                                                                                                      |
| <b>Protein Refseq</b>  | NP_038833                                                                                                                                                                      |

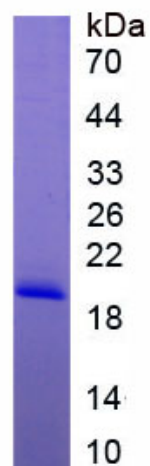
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