

Recombinant Mouse Polymeric Immunoglobulin Receptor/PIGR Protein

Catalog No.: RP03555 **Recombinant**

Sequence Information

Species	Gene ID	Swiss Prot
Mouse	18703	O70570

Tags

C-His

Synonyms

Pigr; Polymeric immunoglobulin receptor;
PlgR; Poly-Ig receptor; Cleaved into:
Secretory component

Product Information

Source	Purification
HEK293 Cells	> 97 % as determined by SDS-PAGE.

Calculated MW	Observed MW
70.8 kDa	90-100 kDa

Endotoxin

< 1.0 EU per µg of the protein as determined by the LAL method

Formulation

Lyophilized from sterile PBS, pH 7.4. Please contact us for any concerns or special requirements. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.

Reconstitution

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stabilizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

Contact

 | 400-999-6126

Background

Polymeric immunoglobulin receptor, also known as PIGR, is a member of the immunoglobulin superfamily and a Fc receptor. The ectodomain of this receptor consists of five units with homology to the variable units of immunoglobulins and a transmembrane region, which also has some homology to certain immunoglobulin variable regions. PIGR is expressed on several glandular epithelia including those of liver and breast. The deduced amino-acid sequence has a length of 764 residues and shows an overall similarity of 56% and 64% with the rabbit and rat counterpart. PIGR mediates transcellular transport of polymeric immunoglobulin molecules, and thus facilitates the secretion of IgA and IgM. During this process, a cleavage occurs that separates the extracellular (known as the secretory component) from the transmembrane segment of PIGR.

Basic Information

Description

Recombinant Mouse Polymeric immunoglobulin receptor/PIGR Protein is produced by HEK293 cells system. The target protein is expressed with sequence (Met 1-Lys 645) of Mouse Polymeric immunoglobulin receptor/PIGR (Accession #NP_035212.2) fused with His at the C-Terminus.

Bio-Activity

Measured by its binding ability in a functional ELISA. Immobilized recombinant mouse PIGR at 5 µg/ml (100 µl/well) can bind mouse IgM with a linear range of 0.156-10 µg/ml.

Shipping

The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

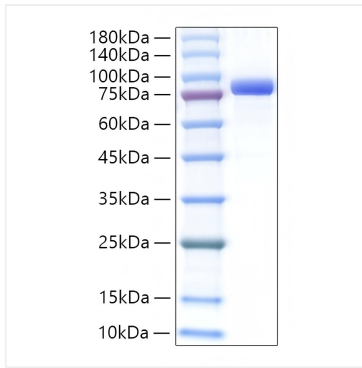
Storage

Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt. After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week. Avoid repeated freeze/thaw cycles.

Operational Notes

For your safety and health, please wear a lab coat and disposable gloves for handling.

Validation Data



Recombinant Mouse Polymeric Immunoglobulin Receptor/PIGR Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.