

# Recombinant Mouse Polymeric Immunoglobulin Receptor/PIGR Protein

Catalog No.: RP03555 Recombinant

## **Sequence Information**

**Species Gene ID Swiss Prot**Mouse 18703 070570

**Tags** C-His

**Synonyms** 

Pigr;Polymeric immunoglobulin receptor; PlgR; Poly-lg 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  $\mu g$  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 stablizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

### **Contact**

## **a** 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  $\mu$ g/ml (100  $\mu$ l/well) can bind mouse IgM with a linear range of 0.156-10  $\mu$ g/ml .

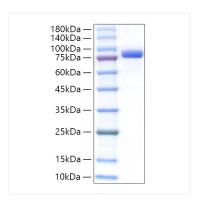
#### Storage

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  $^{\circ}$ C for 3 months, at 2-8  $^{\circ}$ C for up to 1 week.

Avoid repeated freeze/thaw cycles.

# **Validation Data**



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