

# Recombinant Protein Technical Manual Recombinant Mouse PIGR Protein (His Tag)(Active)

**RPES3741** 

#### **Product Data:**

**Product SKU:** RPES3741 **Size:** 50μg

Species: Mouse Expression host: HEK293 Cells

Uniprot: NP 035212.2

#### **Protein Information:**

Molecular Mass: 70.8 kDa

AP Molecular Mass: 9000 kDa

Tag: C-His

**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

 $0.1560 \, \mu g/ml$ .

**Purity:** > 97 % as determined by SDS-PAGE

**Endotoxin:**  $< 1.0 \text{ EU per } \mu \text{g}$  of the protein as determined by the LAL method.

**Storage:** Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C.

Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of

reconstituted samples are stable at < -20°C for 3 months.

**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation:** Lyophilized from sterile PBS, pH 7.4

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:** Functional ELISA

**Synonyms:** Pigr

## Immunogen Information:

Sequence: Met 1-Lys 645

### **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.