

## Recombinant Human PlgR (C-6His)

Catalog No: C381

Description Recombinant Human Polymeric Immunoglobulin Receptor is produced by our Mammalian expression

system and the target gene encoding Lys19-Arg638 is expressed with a 6His tag at the C-terminus.

Source Human Cells

Alternative name Polymeric Immunoglobulin Receptor; PlgR; Poly-Ig Receptor; Hepatocellular Carcinoma-

Associated Protein TB6; PIGR

Accession No. P01833

Predicted Molecular Weight

68.88kDa

AP Molecular Weight

88kDa, reducing conditions.

Formulation Lyophilized from a 0.2 μm filtered solution of 20mM PB, 150mM NaCl, pH 7.2.

Reconstitution Always centrifuge tubes before opening. Do not mix by vortex or pipetting.

It is not recommended to reconstitute to a concentration less than 100µg/ml.

Dissolve the lyophilized protein in distilled water.

Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

Quality Control Purity: Greater than 95% as determined by reducing SDS-PAGE.

Endotoxin: Less than 0.1 ng/μg (1 IEU/μg) as determined by LAL test.

**Shipping** The product is shipped at ambient temperature.

Upon receipt, store it immediately at the temperature listed below.

Storage Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks.

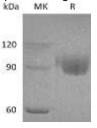
Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Background The human Polymeric Immunoglobulin Receptor (plgR) is a 100 kDa type I transmembrane

glycoprotein. Its precursor is 764 amino acids. It contains an 18 amino acid signal sequence, a 620 amino acid extracellular region, a 23 amino acid transmembrane fragment, and a 103 amino acid cytoplasmic domain. plgR is synthesized by secretory epithelial cells with five Ig-like domains in extracellular region, and transfer to the basolateral plasma membrane. For IgA and IgM polymers, in addition to  $\alpha$ -heavy chains and light Ig chains, a short polypeptide named joining chain (J chain) is also contained and required. plgR can bind larger polymers of IgA (plgA) and pentameric IgM as a carrier that transports IgA and IgM across epithelium. The receptor-ligand complexes are endocytosed and transcytosed to the apical surface, then proteolytic cleavage of the sixth extracellular domain of plgR and generate secretory IgA (SIgA), the plgR fragment is referred to as secretory component (SC). SIgA is a important component of the mucosal immune system. SC is anti-microbial properties and

protects SIgA from proteolytic degradation

**SDS-Page** 



MK: Marker

R: Sample in reducing conditions

