

Product datasheet for **TP726795**

PIGR Human Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant Human Polymeric Immunoglobulin Receptor/PIgR (C-6His)
Species:	Human
Expression cDNA Clone or AA Sequence:	Lys19-Arg638
Tag:	C-His
Buffer:	Lyophilized from a 0.2 um filtered solution of 20mM PB, 150mM NaCl, pH 7.2.
Note:	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.
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.
Stability:	12 months from date of despatch
Locus ID:	5284
UniProt ID:	<u>P01833</u>
Synonyms:	Polymeric Immunoglobulin Receptor; PIgR; Poly-Ig Receptor; Hepatocellular Carcinoma-Associated Protein TB6; PIGR



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Summary:

The human Polymeric Immunoglobulin Receptor (pIgR) 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. pIgR 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 μ -heavy chains and light κ chains, a short polypeptide named joining chain (J chain) is also contained and required. pIgR can bind larger polymers of IgA (pIgA) 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 pIgR and generate secretory IgA (SIgA), the pIgR 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

Protein Families:

Druggable Genome, Secreted Protein, Transmembrane