

Recombinant Bovine Polymeric Immunoglobulin Receptor (PIGR)

Cat. No.: AP9C451

Product Type: Animal Proteins

Size: 10 µg; 50 µg; 200 µg; 1 mg; 5 mg

Product Overview

BioVenic's Recombinant Bovine Polymeric Immunoglobulin Receptor (PIGR) is a recombinant protein expressed from *E.coli*. Its predicted molecular weight is 13.2 kDa. The purity is >95% (SDS-PAGE).

Specifications

Type	Recombinant Protein
Species	Bovine
Expression System	<i>E.coli</i>
Purity	>95% (SDS-PAGE)
Endotoxin	< 1 EU/µg
Predicted Molecular Weight	13.2 kDa
Physical State	Lyophilized
Formulation	The buffer before lyophilization is PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.

Target Information

Bovine polymeric immunoglobulin receptor (PIGR) is a transmembrane glycoprotein that plays a crucial role in mucosal immunity by facilitating the transport of polymeric immunoglobulins, such as IgA and IgM, across mucosal epithelial cells. It is composed of an N-terminal ligand-binding domain, a single membrane-spanning region, and a short cytoplasmic C-terminal tail. In Bovine, PIGR is essential for the secretion of antibodies into mucosal surfaces, providing a first line of defense against pathogens by promoting the formation of secretory immunoglobulins like secretory IgA (SIgA). This process is vital for maintaining mucosal barrier integrity and preventing infections.

Protein	Bovine Polymeric Immunoglobulin Receptor (PIGR)
Protein Synonym	SC; Secretory Component; Hepatocellular carcinoma-associated protein TB6
Gene ID	281401
UniProt ID	P81265

Shipping and Storage

This product is shipped with dry ice. It is recommended to aliquot as needed and store at -80°C upon receipt. Reconstituted protein solution can be stored at 4°C for 1 week, at < -80°C for 12 months. Avoid repeated freezing and thawing.

User Note

Always centrifuge tubes before opening. Avoid mixing by vortexing or pipetting. Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Aliquot the reconstituted solution to minimise freeze-thaw cycles.

The product is for research use only. Not for commercial, prophylactic, diagnostic, or therapeutic applications. Please determine the purpose of the product before purchasing. For further information and inquiry, please contact us.