

Human PIGR Protein (365 Ser/Gly, His Tag)

Catalog Number: 10131-H08H



Sino Biological Inc.
Biological Solution Specialist

General Information

Gene Name Synonym:

FLJ22667; MGC125361; MGC125362; PIGR; Pigr

Protein Construction:

A DNA sequence encoding the extracellular domain (Met 1-Arg 638, 365 Ser/Gly) of human PIGR (NP_002635.2) was expressed with a C-terminal polyhistidine tag.

Source: Human

Expression Host: Human Cells

QC Testing

Purity: > 97 % as determined by SDS-PAGE

Bio Activity:

Measured by its binding ability in a functional ELISA.

1. Immobilized rhhuman IgM at 2 µg/ml (100 µl/well) can bind biotinylated PIGR with a linear range of 0.94-15 ng/ml.

2. When human human IgM is immobilized at 2 µg/ml (100 µl/well), PIGR inhibits 50% binding of biotinylated PIGR (0.062 µg/ml) at the concentration range of 0.03-20 µg/ml.

Endotoxin:

< 1.0 EU per µg of the protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

Predicted N terminal: Lys 19

Molecular Mass:

The soluble form of recombinant human PIGR consists of 630 amino acids after removal of the signal peptide and has a predicted molecular mass of 69 kDa. In SDS-PAGE under reducing conditions, it migrates with an apparent molecular mass of 80-90 kDa due to glycosylation.

Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

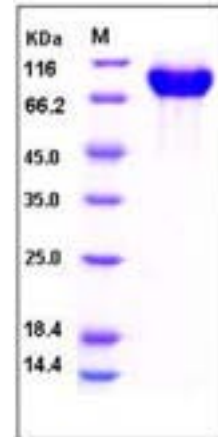
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

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.

References

1. Coyne, R. S. et al., 1995, J. Biol. Chem. 269 (50) :31620-31625.
2. Kaetzel, C.S., 2001, Curr Biol. 11(1): R35-38.

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