General Information

Gene Name Synonym:
Pap2; Reg3; REG3A

Protein Construction:
A DNA sequence encoding the rat REG3A (BAA04904.1) (Met1-Gln174) was expressed, fused with the Fc region of human IgG1 at the C-terminus.

Source: Rat
Expression Host: HEK293 Cells

QC Testing

Purity: > 95 % as determined by SDS-PAGE
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: Glu 26

Molecular Mass:
The recombinant rat REG3A/Fc is a disulfide-linked homodimer. The reduced monomer comprises 390 amino acids and has a predicted molecular mass of 43.4 kDa. The apparent molecular mass of the protein is approximately 44 kDa in SDS-PAGE under reducing conditions.

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

Regenerating islet-derived protein 3-alpha, also known as Regenerating islet-derived protein III-alpha, REG-3-alpha, REG3A, and HIP, is secreted protein which contains one C-type lectin domain. REG3A is constitutively expressed in intestine, and is a pancreatic secretory protein that may be involved in cell proliferation or differentiation. It is overexpressed during the acute phase of pancreatitis and in some patients with chronic pancreatitis. REG3A and REG1A proteins are both involved in liver and pancreatic regeneration and proliferation. REG3A is also a stress protein involved in the control of bacterial proliferation. REG3A is down-regulated in most primary human gastric cancer cells, and might be useful in the diagnosis of gastric cancer. Additionally, REG3A is a target of beta-catenin signaling in Huh7 hepatoma cells. The REG1A and REG3A are downstream targets of the Wnt pathway during liver tumorigenesis.