Cynomolgus REG1A / PSPS Protein (Fc Tag)

Catalog Number: **90162-C02H**

General Information

Gene Name Synonym:

REG1A

Protein Construction:

A DNA sequence encoding the cynomolgus REG1A (G8F4F8) (Met1-Asn166) was expressed with the Fc region of human IgG1 at the C-terminus.

Source: Cynomolgus

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 ℃

Predicted N terminal: Gln 23

Molecular Mass:

The recombinant cynomolgus REG1A comprises 385 amino acids and has a calculated molecular mass of 43.2 KDa. The apparent molecular mass of it is approximately 44 KDa respectively in SDS-PAGE.

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:

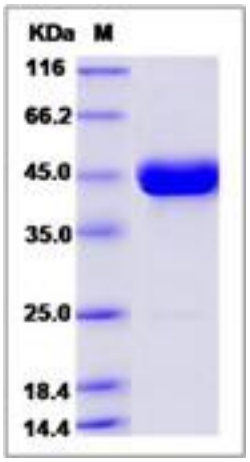
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Regenerating (reg) gene encodes protein that has been involved in pancreatic lithogenesis and the regeneration of islet cells and therefore the abnormality of reg genes could be associated with fibrocalculous pancreatopathy. REG I has been shown to be crucial for induction of ductal epithelial cells to differentiate into some cells. Lithostathine-1-alpha, also known as Pancreatic stone protein, Pancreatic thread protein, Regenerating islet-derived protein 1-alpha, REG1A, REG-1-alpha, and PSPS, is highly expressed in fetal and infant brains. REG1A contains one C-type lectin domain and is a known growth factor affecting pancreatic islet beta cells. REG1A may act as an inhibitor of spontaneous calcium carbonate precipitation. It may also be associated with neuronal sprouting in brain, and with brain and pancreas regeneration. REG1A has been reported to be expressed in human cancers, and it may be positively correlated with patient's prognosis. REG3A and REG1A proteins are both involved in liver and pancreatic regeneration and proliferation. High levels of REG1A expression by tumor cells are an independent predictor of a poor prognosis in patients with non-small cell lung cancer (NSCLC).

References

1.Boonyasrisawat W, *et al.* (2002) Analysis of the reg1alpha and reg1beta gene transcripts in patients with fibrocalculous pancreatopathy. Southeast Asian J Trop Med Public Health. 33(2): 365-72. 2.Tezel E, *et al.* (2004) REG I as a marker for human pancreatic acinoductular cells. Hepatogastroenterology. 51(55): 91-6. 3.Geng J, *et al.* (2009) REG1A predicts recurrence in stage Ta/T1 bladder cancer. Eur J Surg Oncol. 35(8): 852-7.