



Recombinant Protein Technical Manual
Recombinant Human REG1B/PSPS2 Protein (His Tag)
RPES0501

Product Data:

Product SKU: RPES0501

Size: 20µg

Species: Human

Expression host: HEK293 Cells

Uniprot: NP_006498.1

Protein Information:

Molecular Mass: 17.7 kDa

AP Molecular Mass: 19-21 kDa

Tag: C-His

Bio-activity:

Purity: > 95 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from sterile PBS, pH 7.4

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: PSPS2;REGH;REGI-BETA;REGL

Immunogen Information:

Sequence: Met 1-Asn 166

Background:

Regenerating gene (Reg), first isolated from a regenerating islet cDNA library, encodes a secretory protein with a growth stimulating effect on pancreatic beta cells, and could be associated with fibrocalculous pancreatopathy. Reg and Reg-related genes which were expressed in various organs have been revealed to constitute a multigene family, the Reg family consisting of four subtypes (types I, II, III, IV) and are involved in cancers and neurodegenerative diseases. Regenerating islet-derived 1 beta (REG1B), also known as Lithostathine-beta and Pancreatic stone protein 2 (PSPS2), is a types I Reg protein and contains one typical C-type lectin domain. REG1B is a 166-amino acid protein which has 22 amino acid substitutions in comparison with the previously isolated human REG1A, and it is expressed only in pancreas. REG1B is normally found in the exocrine pancreas, whereas in other tissues it appears either only under pathological conditions, such as Alzheimer's disease (brain), cancer (colon), or during regeneration such as neuronal sprouting in brain and pancreas regeneration. REG1B might act as an inhibitor of spontaneous calcium carbonate precipitation. The REG1A and REG1B gene and proteins could play different roles in the pancreas.