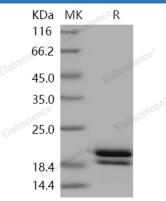
Recombinant Human REG1B/PSPS2 Protein (His Tag)

Catalog Number: PKSH031050

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description	
Species	Human
Source	HEK293 Cells-derived Human REG1B/PSPS2 protein Met 1-Asn 166, with an C-
	terminal His
Calculated MW	17.7 kDa
Observed MW	19-21 kDa
Accession	NP_006498.1
Bio-activity	Not validated for activity
Properties	
Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Generally, 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 $< -20^{\circ}C$ 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
	Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants
	before lyophilization.
	Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 95 % as determined by reducing SDS-PAGE.

Background

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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 Regrelated 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-1-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 was 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.