

## REG1B

### Recombinant Human Regenerating Islet-Derived 1 Beta His

<b>Catalog No.</b>	CRR107A CRR107B CRR107C	<b>Quantity:</b>	2 µg 10 µg 1.0 mg
<b>Alternate Names:</b>	Lithostathine-1-beta, Regenerating protein I beta, REG1B, REGL.		
<b>Description:</b>	<p>Reg protein was first shown to be stimulated during the regeneration of pancreatic islets. Since then, many Reg-related proteins have been identified in humans and other animals. In human, the four REG family genes, i.e., REG 1 alpha, REG 1 beta, REG-related sequence (RS) and HIP/PAP, have so far been isolated. These proteins share a similar structure and physiological function. Reg protein is a growth factor for pancreatic beta cells and also suggests that the administration of Reg protein could be used as another therapeutic approach for diabetes mellitus.</p> <p>Reg I was found to be expressed mainly in pancreatic beta and acinoductular cells as well as gastric fundic enterochromaffin-like (ECL) cells. Reg I production in ECL cells is stimulated by gastrin, as well as by the proinflammatory cytokine, cytokine-induced neutrophil chemoattractant (CINC)-2Beta.</p> <p>In patients with chronic hypergastrinemia, Reg production is stimulated, with the increased proliferation of gastric mucosal cells. Patients with <i>Helicobacter pylori</i> infection also showed increased Reg production in the gastric mucosa, partly via increased plasma gastrin concentration and partly via increased proinflammatory cytokine production. The serum concentration of the reg-protein was significantly higher in patients with various pancreatic diseases than in normal controls, and was also significantly higher in patients with acute pancreatitis or chronic relapsing pancreatitis than in patients with chronic pancreatitis. Furthermore, the serum PSP/reg-protein concentration was also significantly increased in liver cirrhosis, choledocholithiasis, and various cancers of the digestive system.</p> <p>Human REG 1 beta is a 166 aa protein with a 22 aa signal peptide. Recombinant Human REG 1 beta His Tag fusion protein contains 144 aa residues of the Human REG 1 beta and 12 aa residues of the His tag at the N-terminus.</p>		
<b>GenelD:</b>	5968		
<b>Source:</b>	<i>E. coli</i>		
<b>Molecular Weight:</b>	17.8 kDa		
<b>Formulation:</b>	Filtered (0.4 µm) and lyophilized from 0.5 mg/ml in 20 mM Tris, pH 8.0.		
<b>Purity:</b>	> 95% as determined by SDS-PAGE.		
<b>Amino Acid Sequence:</b>	MKHHHHHHAS HMQESQTELP NPRISCPEGT NAYRSYCYYF NEDPETWVDA DLYCQNMNSG NLVSVLTQAE GAFVASLIKE SSTDDSNVWI GLHDPKKNRR WHWSSGSLVS YKSWDTGSPS SANAGYCASL TSCSGFKKWK DESCEKKFSF VCKFKN.		
<b>Reconstitution:</b>	<b>Centrifuge vial prior to opening.</b> Add deionized water to a working concentration of approximately 0.5 mg/ml and let the lyophilized pellet dissolve completely. Product is not sterile! Please filter the product by appropriate sterile filter before using it in cell culture.		
<b>Applications:</b>	Western blotting, ELISA.		



**Storage & Stability:**

Store lyophilized protein at -20°C. Aliquot the product after reconstitution. Reconstituted protein can be stored at 4°C for a limited period of time. The lyophilized protein remains stable until the expiration date when stored at -20°C. **Avoid repeated freeze-thaw cycles.**

**NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.**

