

REG3A

Recombinant Human Regenerating Islet-Derived 3 Alpha His

Catalog No.	CRP126A CRP126B CRP126C	Quantity:	2 µg 10 µg 1.0 mg
Alternate Names:	Reg III-alpha, REG-III, REG3, Pancreatitis-associated protein 1, PAP-H, PAP, PAP1, hepatocarcinoma-intestine-pancreas, HIP, pancreatic beta cell growth factor, PBCGF.		
Description:	<p>Pancreatitis-associated protein (PAP) is a secretory protein not normally expressed in healthy pancreas but highly induced during acute pancreatitis. While PAP has been shown to be anti-bacterial and anti-apoptotic in vitro, its definitive biological function in vivo is not clear. Using antisense oligonucleotides, inhibition of PAP expression significantly worsened pancreatitis in a rat model. During pancreatitis, PAP released by the pancreas could mediate lung inflammation through induction of hepatic TNF- alpha expression and subsequent increase in circulating TNF-alpha.</p> <p>PAP is also activated in primary liver cancers. In pancreatic cancer, PAP was overexpressed in 79% (30 of 38) of pancreatic ductal adenocarcinoma, 19% (7 of 36) of chronic pancreatitis, and 29% (2 of 7) of mucinous cystadenoma. PAP was found in malignant ductular structures in pancreatic carcinomas as well as in benign proliferating ductules and acinar cells in chronic pancreatitis. Elevation of PAP in patients with pancreatic cancer is not merely explainable by concomitant pancreatitis, but seems to be due to increased PAP production by the cancer cells and is also correlated to tumour load as expressed by the UICC stages.</p> <p>Intestinal epithelial expression of PAP was induced under conditions of mucosal inflammation initiated by exposure to commensal bacteria or DSS as well as inflamed IBD colon. Increased serum level of PAP diagnosed ileal location in active Crohn disease with a sensitivity of 60%, a specificity of 94%, a positive predictive value of 84% and a negative predictive value of 81%. Elevated serum PAP (> 50 ng/mL) is significantly associated with disease activity and ileal location of Crohn disease.</p> <p>The Recombinant Human REG3A protein is produced with N-terminal fusion of His Tag. The REG3A His -Tagged Fusion Protein is an 18.4 kDa protein containing 149 amino acid residues of the Human REG3A plus the N-terminal 16 additional amino acid His Tag.</p>		
Physical Appearance:	Filtered White lyophilized (freeze-dried) powder		
GenelD:	5068		
Source:	<i>E. coli</i>		
Molecular Weight:	18.4 kDa		
Formulation:	Filtered (0.4 µm) and lyophilized from 0.5 mg/ml in 0.05 M Acetate buffer, pH-4.		
Purity:	Greater than 95.0% as determined by SDS-PAGE		
Applications:	Western blotting, ELISA.		
Amino Acid Sequence:	MRGSHHHHHH GMASHMEEPQ RELPSARIRC PKGSKAYGSH CYALFLSPKS WTDADLACQK RPSGNLVSVL SGAEGSFVSS LVKSIGNSYS YVWIGLHDPT QGTEPNGEGW EWSSSDVMNY FAWERNPSTI SSPGHCASLS RSTAFRLRWKD YNCNVRLPYV CKFTD		



Reconstitution:

Centrifuge vial prior to opening. Add 0.1 M Acetate buffer, pH 4, to prepare a working stock solution of approximately 0.5 mg/ml. Let the lyophilized pellet completely dissolve. For conversion to a higher pH value, dilute by adding the relevant buffer to a concentration of 10 µg/ml. In higher concentrations the solubility of this antigen is limited. Product is not sterile! Please filter the product by an appropriate sterile filter before using it in the cell culture.

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.

