

Product Data Sheet

Cat # RP-845

Recombinant Human Regenerating Protein 1 beta

Size: 10 ug

Reg protein was 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 Reg-related proteins are classified into four subfamilies according to their amino-acid sequences, but they 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. Human REG cDNA which encodes a 166-amino acid protein with a 22-amino acid signal peptide. The amino acid sequence of human REG protein has 68% homology to that of rat Reg protein. Reg I was found to be expressed mainly in pancreatic beta and acinoductular cells as well as gastric fundic enterochromaffin-like (ECL) cells.

SOURCE:

The Recombinant Human REG 1 beta manufactured with N-terminal fusion of His Tag. The Human REG 1 beta His-Tagged Fusion Protein, produced in E. coli, is 17.8 kDa protein containing 144 amino acid residues of the Human REG 1 beta and 12 additional amino acid residues – His Tag (underlined). Filtered (0.4µm) and lyophilized from 0.5 mg/ml in 20mM Tris, pH 8.0.

APPLICATION AND SUGGESTED DILUTIONS:

Western blotting, ELISA. Greater than 95% as determined by SDS-PAGE. Users must optimize the appropriate concentration and conditions for each assay.

STORAGE & STABILITY:

It is recommended to add deionized water to a working concentration 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 the cell culture. Store lyophilized protein at -20°C. Aliquot the product after reconstitution to avoid repeated freezing/thawing cycles. Reconstituted protein can be stored at 4°C for a limited period of time; it does not show any change after two weeks at 4°C. The lyophilized protein remains stable until the expiry date when stored at -20°C.

USAGE:

This item is for LABORATORY RESEARCH USE ONLY.

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