

## Recombinant Human REG4, His-tagged

**Cat. No.** REG4-194H    **Lot. No.** (See product label)

### SPECIFICATION

|                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Overview</b>         | Recombinant Human regenerating islet-derived family, member 4 (His-tagged) contains 136 amino acids and has a molecular mass of 17.4 kDa. And this protein expressed in <i>E.Coli</i> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Species</b>                  | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Source</b>                   | E.coli                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Description</b>              | <p>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 suggest that the administration of Reg protein could be used as another therapeutic approach for diabetes mellitus. human REG cDNA which encoded 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. Reg I production in ECL cells is stimulated by gastrin, as well as by the proinflammatory cytokine, cytokine-induced neutrophil chemoattractant (CINC)-2Beta.</p> |
| <b>Sequences Of Amino Acids</b> | MKHHHHHHAS HMDIIMRPSC APGWFYHKS N CYGYFRKL RN WSDAELECQS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

 Tel: 1-631-559-9269    1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)     Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

YGNGAHLASI LSLKEASTIA EYISGYQRSQ PIWIGLHDPQ KRQQWQWIDG  
 AMYLYRSWSG KSMGGNKHC AEMSSNNFLT WSSNECNKRQ HFLCKYRP.

|                             |                                                                                                                                                                                                                                                      |
|-----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Specificity</b>          | The amino acid sequence of the recombinant Human REG IV is 100% homologous to the amino acid sequence of the Human REG IV without signal sequence.                                                                                                   |
| <b>Purification Method</b>  | Ni-NTA chromatography.                                                                                                                                                                                                                               |
| <b>Purity</b>               | >95% (SDS-PAGE analyzed).                                                                                                                                                                                                                            |
| <b>Formulation</b>          | Sterile filtered and lyophilized from 0.5 mg/ml in 20 mM Tris , pH 8.0.                                                                                                                                                                              |
| <b>Reconstitution</b>       | Add 0.2 ml of deionized H <sub>2</sub> O and let the lyophilized pellet dissolve completely.                                                                                                                                                         |
| <b>Stability/Shelf Life</b> | The lyophilized protein remains stable until the expiry date when stored at -20°C.                                                                                                                                                                   |
| <b>Applications</b>         | Western blotting, ELISA.                                                                                                                                                                                                                             |
| <b>Storage</b>              | 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. |

## GENE INFORMATION

|                  |                                                                                                                                                                                                                                                     |
|------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Gene Name</b> | REG4 regenerating islet-derived family, member 4 [ Homo sapiens ]                                                                                                                                                                                   |
| <b>Synonyms</b>  | REG4; GISP; REG-IV; RELP; OTTHUMP00000014030; OTTHUMP00000014031; Reg IV; REG-like protein; regenerating gene type IV; Gastrointestinal secretory protein; regenerating islet-derived family, member 4; Regenerating islet-derived family, member 4 |

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

|                            |                        |
|----------------------------|------------------------|
| <b>Gene ID</b>             | 83998                  |
| <b>mRNA Refseq</b>         | NM_001159352           |
| <b>Protein Refseq</b>      | NP_001152824           |
| <b>MIM</b>                 | 609846                 |
| <b>UniProt ID</b>          | Q9BYZ8                 |
| <b>Chromosome Location</b> | 1p13.1-p12             |
| <b>Function</b>            | binding; sugar binding |

 Tel: 1-631-559-9269 1-516-512-3133 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127 45-1 Ramsey Road, Shirley, NY 11967, USA