



# Recombinant Protein Technical Manual

**Recombinant Mouse REG4/RELP Protein (His Tag)(Active)**  
RPES3885

## Product Data:

**Product SKU:** RPES3885

**Size:** 50µg

**Species:** Mouse

**Expression host:** HEK293 Cells

**Uniprot:** NP\_080604.2

## Protein Information:

**Molecular Mass:** 17.5 kDa

**AP Molecular Mass:** 23-30 kDa

**Tag:** C-His

**Bio-activity:** Measured by the ability of the immobilized protein to support the adhesion and proliferation of HCT16 human colorectal carcinoma cells (ATCC: CCL-247) under low serum conditions. When 5 x 10<sup>4</sup> cells/well are added to mouse REG4 coated plates (0.16 µg/ml)

**Purity:** > 95 % as determined by SDS-PAGE

**Endotoxin:** < 1.0 EU per µg of the protein as determined by the LAL method.

**Storage:** 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°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

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** 2010002L15Rik;GISP;RELP

## Immunogen Information:

**Sequence:** Met 1-Thr 157

## Background:

Regenerating islet-derived protein 4, also known as REG-like protein, REG4, GISP and RELP, a member of the regenerating gene family belonging to the calcium (C-type) dependent lectin superfamily, has been found to be involved in malignancy in several different organs including the stomach, colorectum, pancreas and prostate. It is highly expressed in the gastrointestinal tract and markedly up-regulated in colon adenocarcinoma, pancreatic cancer, gastric adenocarcinoma, and inflammatory bowel disease. Expression of the Reg4 in different cell types has been associated with regeneration, cell growth and cell survival, cell adhesion and resistance to apoptosis. REG4 protein overexpression is associated with an unfavorable response to preoperative chemoradiotherapy and may be used as a predictive biomarker clinically. REG4 may play an important role in the development and progression of colorectal cancer, as well as in intestinal morphogenesis and epithelium restitution.