



# Reg III $\delta$ (L-15): sc-103861

## BACKGROUND

The regeneration (REG) family consists of secretory proteins involved in liver, pancreatic, gastric and intestinal cell proliferation or differentiation. Members of the REG family are divided into four subclasses, designated types I, II, III and IV, and have been implicated in the regulation of cell growth, tumorigenesis and the progression of cancer. Reg III proteins (Reg III $\alpha$ , Reg III $\beta$ , Reg III $\gamma$  and Reg III $\delta$ ) have a conserved expression in pancreatic islets, and with the exception of Reg III $\delta$ , all Reg III members are also highly expressed in the intestinal tract. Reg III $\delta$  (regenerating islet-derived 3 delta), also known as Ingaprp, islet neogenesis associated protein-related protein or MGC130575, is a 175 amino acid protein that is predominantly expressed in exocrine pancreas, but not in hyperplastic islets, normal islets, colon or intestine.

## REFERENCES

1. Narushima, Y., Unno, M., Nakagawara, K., Mori, M., Miyashita, H., Suzuki, Y., Noguchi, N., Takasawa, S., Kumagai, T., Yonekura, H. and Okamoto, H. 1997. Structure, chromosomal localization and expression of mouse genes encoding type III Reg, Reg III $\alpha$ , Reg III $\beta$ , Reg III $\gamma$ . *Gene* 185: 159-168.
2. Sasahara, K., Yamaoka, T., Moritani, M., Yoshimoto, K., Kuroda, Y. and Itakura, M. 2000. Molecular cloning and tissue-specific expression of a new member of the regenerating protein family, islet neogenesis-associated protein-related protein. *Biochim. Biophys. Acta* 1500: 142-146.
3. Abe, M., Nata, K., Akiyama, T., Shervani, N.J., Kobayashi, S., Tomioka-Kumagai, T., Ito, S., Takasawa, S. and Okamoto, H. 2000. Identification of a novel Reg family gene, Reg III $\delta$ , and mapping of all three types of Reg family gene in a 75 kilobase mouse genomic region. *Gene* 246: 111-122.
4. Nata, K., Liu, Y., Xu, L., Ikeda, T., Akiyama, T., Noguchi, N., Kawaguchi, S., Yamauchi, A., Takahashi, I., Shervani, N.J., Onogawa, T., Takasawa, S. and Okamoto, H. 2004. Molecular cloning, expression and chromosomal localization of a novel human REG family gene, Reg III. *Gene* 340: 161-170.
5. Taylor-Fishwick, D.A., Bowman, A., Korngiebel-Rosique, M. and Vinik, A.I. 2008. Pancreatic islet immunoreactivity to the Reg protein INGAP. *J. Histochem. Cytochem.* 56: 183-191.
6. Hamblet, N.S., Shi, W., Vinik, A.I. and Taylor-Fishwick, D.A. 2008. The Reg family member INGAP is a marker of endocrine patterning in the embryonic pancreas. *Pancreas* 36: 1-9.

## CHROMOSOMAL LOCATION

Genetic locus: Reg3d (mouse) mapping to 6 C3.

## SOURCE

Reg III $\delta$  (L-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Reg III $\delta$  of mouse origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-103861 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

Reg III $\delta$  (L-15) is recommended for detection of Reg III $\delta$  of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other Reg family members.

Molecular Weight of Reg III $\delta$ : 22 kDa.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## STORAGE

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.