

# Reg I $\alpha$ (S-19): sc-83025

## 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. They have been implicated in the regulation of cell growth, tumorigenesis and the progression of cancer. Reg I $\alpha$  (regenerating islet-derived I  $\alpha$ ), also known as Lithostathine-1 $\alpha$ , PSPS, REG, P19 or PTP, is a 166 amino acid protein that contains one C-type lectin domain and belongs to the Reg family of secretory proteins. Expressed at high levels in pancreas and fetal brain and at lower levels in adult brain, Reg I $\alpha$  is thought to inhibit spontaneous calcium carbonate precipitation and may also be associated with regeneration of brain and pancreas tissue, as well as with neuronal sprouting. The gene encoding Reg I $\alpha$  is tandemly clustered with other Reg proteins on a region of human chromosome 2, suggesting that several Reg proteins may have arisen from a gene duplication event.

## REFERENCES

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## RESEARCH USE

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

## CHROMOSOMAL LOCATION

Genetic locus: REG1A (human) mapping to 2p12.

## SOURCE

Reg I $\alpha$  (S-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Reg I $\alpha$  of human 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-83025 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

Reg I $\alpha$  (S-19) is recommended for detection of Reg I $\alpha$  of human 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.

Suitable for use as control antibody for Reg I $\alpha$  siRNA (h): sc-76382, Reg I $\alpha$  shRNA Plasmid (h): sc-76382-SH and Reg I $\alpha$  shRNA (h) Lentiviral Particles: sc-76382-V.

Molecular Weight of Reg I $\alpha$ : 19 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.

## PROTOCOLS

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