Reg II (Q-18): sc-80318



The Power to Question

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. Specifically, increased expression of Reg III α results in pancreatic inflammation and liver carcinogenesis. Reg III α , also designated pancreatitis-associated protein, localizes to the apical region of pancreatic acinar cells and is similar to the C-type lectin superfamily. The Reg III α protein is mainly expressed in the intestine, with lower expression detected in healthy pancreas. It is also detected in pancreatic juice as a result of pancreatic inflammation.

REFERENCES

- Beavo, J.A., Bechtel, P.J. and Krebs, E.G. 1974. Activation of protein kinase by physiological concentrations of cyclic AMP. Proc. Natl. Acad. Sci. USA 71: 3580-3583.
- 2. Krebs, E.G. and Beavo, J.A. 1980. Phosphorylation and dephosphorylation of enzymes. Annu. Rev. Biochem. 48: 923-959.
- Maldonado, F. and Hanks, S.K. 1988. cAMP-dependent protein kinase, α-catalytic subunit. Nucleic Acids Res. 16: 8189-8190.
- Gonzalez, G.A. and Montminy, M.R. 1989. Cyclic AMP stimulates Somatostatin gene transcription by phosphorylation of CREB at Serine 133. Cell 59: 675-680.
- Beebe, S.J., Oyen, O., Sandberg, M., Froysa, A., Hansson, V. and Jahnsen, T. 1990. cAMP-dependent protein kinase, β-catalytic subunit. Mol. Endocrinol. 4: 465-475.
- Meinkoth, J.L., Alberts, A.S., Went, W., Fantozzi, D., Taylor, S.S., Hagiwara, M., Montminy, M. and Feramisco, J.R. 1993. Signal transduction through the cAMP-dependent protein kinase. Mol. Cell. Biochem. 127-128: 179-186.
- 7. Nordheim, A. 1994. CREB takes CBP to tango. Nature 370: 177-178.

CHROMOSOMAL LOCATION

Genetic locus: PRKAR2A (human) mapping to 3p21.2; Prkar2a (mouse) mapping to 9 F2.

SOURCE

Reg II (0-18) is a rat monoclonal antibody raised against full length recombinant Reg II of mouse origin.

PRODUCT

Each vial contains 100 $\mu g \; lg G_{2a}$ in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

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

APPLICATIONS

Reg II (0-18) is recommended for detection of Reg II of mouse origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with Reg I or Reg IIIa.

Suitable for use as control antibody for REG III α siRNA (m): sc-61451, REG III α shRNA Plasmid (m): sc-61451-SH and REG III α shRNA (m) Lentiviral Particles: sc-61451-V.

Molecular Weight of Reg II: 50 kDa.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

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