

Reg IV (Lc07): sc-80320

BACKGROUND

Reg IV is part of the regenerating gene family within the C-type lectin superfamily. This family is involved in liver, pancreatic, gastric and intestinal cell proliferation and differentiation. Reg IV is a 158-amino acid secretory protein implicated in cell regeneration and/or survival with a definite growth stimulating effect on pancreatic β cells. It is highly expressed in colorectal, gastric, prostate and other types of cancer. Reg IV-positive tumor cells display different phenotypes including mucus-secreting, enterocyte-like and undifferentiated.

REFERENCES

1. Violette, S., Festor, E., Pandrea-Vasile, I., Mitchell, V., Adida, C., Dussault, E., Lacorte, J.M., Chambaz, J., Lacasa, M. and Lesuffleur, T. 2002. Reg IV, a new member of the regenerating gene family, is overexpressed in colorectal carcinomas. *Int. J. Cancer* 103: 185-193.
2. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 609846. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
3. Zhang, Y.W., Ding, L.S. and Lai, M.D. 2003. Reg gene family and human diseases. *World J. Gastroenterol.* 9: 2635-2641.
4. Yonemura, Y., Sakurai, S., Yamamoto, H., Endou, Y., Kawamura, T., Bandou, E., Elnemr, A., Sugiyama, K., Sasaki, T., Akiyama, T., Takasawa, S. and Okamoto, H. 2003. REG gene expression is associated with the infiltrating growth of gastric carcinoma. *Cancer* 98: 1394-1400.
5. Zhang, Y., Lai, M., Lv, B., Gu, X., Wang, H., Zhu, Y., Zhu, Y., Shao, L. and Wang, G. 2003. Overexpression of Reg IV in colorectal adenoma. *Cancer Lett.* 200: 69-76.
6. Miyagawa, K., Sakakura, C., Kin, S., Nakase, Y., Fukuda, K., Hagiwara, A., Okazaki, Y., Hayashizaki, Y. and Yamagishi, H. 2004. Overexpression of Reg IV in peritoneal dissemination of gastric cancer. *Gan To Kagaku Ryoho* 31: 1909-1911.
7. 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.
8. Gu, Z., Rubin, M.A., Yang, Y., Deprimo, S.E., Zhao, H., Horvath, S., Brooks, J.D., Loda, M. and Reiter, R.E. 2005. Reg IV: a promising marker of hormone refractory metastatic prostate cancer. *Clin. Cancer Res.* 11: 2237-2243.
9. Heiskala, K., Giles-Komar, J., Heiskala, M. and Andersson, L.C. 2006. High expression of RELP (Reg IV) in neoplastic goblet cells of appendiceal mucinous cystadenoma and pseudomyxoma peritonei. *Virchows Arch* 448: 295-300.

CHROMOSOMAL LOCATION

Genetic locus: REG4 (human) mapping to 1p12.

SOURCE

Reg IV (Lc07) is a mouse monoclonal antibody raised against full length recombinant Reg IV of human origin.

PRODUCT

Each vial contains 100 μ g IgG_{2b} in 1.0 ml PBS with < 0.1% sodium azide and protein stabilizer.

APPLICATIONS

Reg IV (Lc07) is recommended for detection of Reg IV of human 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 β .

Suitable for use as control antibody for Reg IV siRNA (h): sc-61448, Reg IV shRNA Plasmid (h): sc-61448-SH and Reg IV shRNA (h) Lentiviral Particles: sc-61448-V.

Molecular Weight of Reg IV: 20 kDa.

SELECT PRODUCT CITATIONS

1. Zhang, S., Zhao, G., Zhao, Y., Gu, R., Peng, C., Pu, Z. and Wu, M. 2017. Expression and correlation analysis of Reg IV and vascular endothelial growth factors (VEGF-A and VEGF-C) in metastatic spinal tumors. *Oncol. Lett.* 13: 3517-3521.

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 for detailed protocols and support products.