

GALP (K-15): sc-139360

BACKGROUND

The galanin family of proteins are key members for inflammatory processes and cell proliferation, and may function as potential biomarkers for colon cancer. Produced in both neuronal and nonneuronal cells in the skin, members of the galanin family include galanin, galanin-message associated peptide, galanin-like peptide and alarin. GALP, also known as galanin-like peptide, is a 116 amino acid secreted protein belonging to the galanin family. Mainly produced in the arcuate nucleus of the hypothalamus (ARC) and the posterior pituitary, GALP is thought to function in CNS homeostatic processes, including the regulation of gonadotropin-releasing hormone secretion. GALP binds to the G-protein coupled galanin receptors, including GALR1, GALR2 and GALR3, and may also play a role in energy metabolism, with significant implications towards obesity. GALP exists as two alternatively spliced isoforms.

REFERENCES

- Kim, K.Y., et al. 2007. Galanin is up-regulated in colon adenocarcinoma. *Cancer Epidemiol. Biomarkers Prev.* 16: 2373-2378.
- Bauer, J.W., et al. 2008. Galanin family of peptides in skin function. *Cell. Mol. Life Sci.* 65: 1820-1825.
- Bauer, J.W., et al. 2010. Galanin family of peptides in skin function. *EXS* 102: 51-59.
- Lawrence, C.B., et al. 2010. Galanin-like peptide: neural regulator of energy homeostasis and reproduction. *EXS* 102: 263-280.
- Shiba, K., et al. 2010. Galanin-like peptide and the regulation of feeding behavior and energy metabolism. *FEBS J.* 277: 5006-5013.
- Shioda, S., et al. 2010. Galanin-like peptide: a key player in the homeostatic regulation of feeding and energy metabolism? *Int. J. Obes.* 35: 619-628.
- Lawrence, C., et al. 2011. Galanin-like peptide (GALP) is a hypothalamic regulator of energy homeostasis and reproduction. *Front. Neuroendocrinol.* 32: 1-9.
- Lang, R., et al. 2011. The galanin peptide family in inflammation. *Neuropeptides* 45: 1-8.

CHROMOSOMAL LOCATION

Genetic locus: Galp (mouse) mapping to 7 A1.

SOURCE

GALP (K-15) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of GALP of mouse origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-139360 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

GALP (K-15) is recommended for detection of GALP of mouse and rat origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with Alarin isoform.

Suitable for use as control antibody for GALP siRNA (m): sc-145319, GALP shRNA Plasmid (m): sc-145319-SH and GALP shRNA (m) Lentiviral Particles: sc-145319-V.

Molecular Weight of GALP isoform 1: 13 kDa.

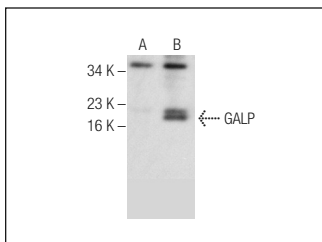
Molecular Weight of GALP isoform 2: 5 kDa.

Positive Controls: GALP (m): 293T Lysate: sc-178651.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



GALP (K-15): sc-139360. Western blot analysis of GALP expression in non-transfected: sc-117752 (A) and mouse GALP transfected: sc-178651 (B) 293T whole cell lysates.

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 or our catalog for detailed protocols and support products.