

GALP (D-14): sc-139357

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

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- 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.

CHROMOSOMAL LOCATION

Genetic locus: GALP (human) mapping to 19q13.43; Galp (mouse) mapping to 7 A1.

SOURCE

GALP (D-14) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of GALP of human 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-139357 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

GALP (D-14) is recommended for detection of GALP of human and, to a lesser extent, mouse 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 (h): sc-97912, GALP siRNA (m): sc-145319, GALP shRNA Plasmid (h): sc-97912-SH, GALP shRNA Plasmid (m): sc-145319-SH, GALP shRNA (h) Lentiviral Particles: sc-97912-V and GALP shRNA (m) Lentiviral Particles: sc-145319-V.

Molecular Weight of GALP isoform 1: 13 kDa.

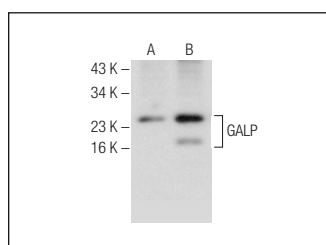
Molecular Weight of GALP isoform 2: 5 kDa.

Positive Controls: MDA-MB-231 cell lysate: sc-2232.

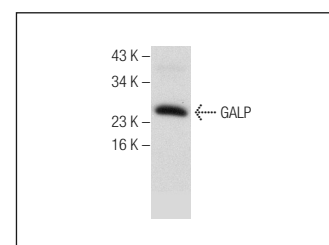
RECOMMENDED SECONDARY REAGENTS

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 (D-14): sc-139357. Western blot analysis of GALP expression in non-transfected: sc-117752 (A) and mouse GALP transfected: sc-178651 (B) 293T whole cell lysates.



GALP (D-14): sc-139357. Western blot analysis of GALP expression in MDA-MB-231 whole cell lysate.

RESEARCH USE

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

PROTOCOLS

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