

Galanin (B-8): sc-166927

BACKGROUND

Though originally implicated in the regulation of feeding behavior, the neuropeptide Galanin is now known to be involved in several physiological functions, including reproduction, and that it also inhibits various aspects of neurotransmission and memory. Galanin influences gonadotrophin-releasing hormone secretion in the hypothalamo-pituitary axis. Galanin is localized in brain pathways involved in both cognition and affect, and may inhibit learning and memory by inhibiting neurotransmitter release and neuronal firing rate. Galanin is upregulated in primary afferent and sympathetic neurones and may be involved in the development of sympathetic perineuronal baskets ("RINGS") following nerve injury.

REFERENCES

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3. Kleine, B., Wolfahrt, S., Lotsch, M., Gantner, T. and Rossmann, W.G. 2001. Expression of Galanin in human placenta. *Mol. Hum. Reprod.* 7: 379-385.
4. Wrenn, C.C. and Crawley, J.N. 2001. Pharmacological evidence supporting a role for Galanin in cognition and affect. *Prog. Neuropsychopharmacol. Biol. Psychiatry* 25: 283-299.
5. Hu, P. and McLachlan, E.M. 2001. Long-term changes in the distribution of Galanin in dorsal root ganglia after sciatic or spinal nerve transection in rats. *Neuroscience* 103: 1059-1071.
6. Sachs, H.H., Wynick, D. and Zigmond, R.E. 2007. Galanin plays a role in the conditioning lesion effect in sensory neurons. *Neuroreport* 18: 1729-1733.

CHROMOSOMAL LOCATION

Genetic locus: GAL (human) mapping to 11q13.3.

SOURCE

Galanin (B-8) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 97-123 near the C-terminus of Galanin of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-166927 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

RESEARCH USE

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

APPLICATIONS

Galanin (B-8) is recommended for detection of Galanin precursor and Galanin message-associated peptide (GMAP) of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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).

Suitable for use as control antibody for Galanin siRNA (h): sc-43797, Galanin shRNA Plasmid (h): sc-43797-SH and Galanin shRNA (h) Lentiviral Particles: sc-43797-V.

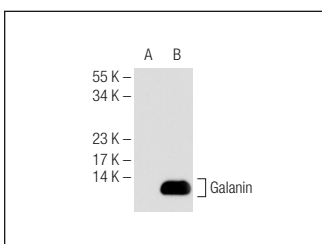
Molecular Weight of Galanin: 13 kDa.

Positive Controls: Galanin (h): 293T Lysate: sc-114709.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



Galanin (B-8): sc-166927. Western blot analysis of Galanin expression in non-transfected: sc-117752 (A) and human Galanin transfected: sc-114709 (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 for detailed protocols and support products.