

Galanin (N-20): sc-16411

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

1. Key, S. and Wray, S. 2000. Two olfactory placode derived galanin subpopulations: luteinizing hormone-releasing hormone neurones and vomeronasal cells. *J. Neuroendocrinol.* 12: 535-545.
2. Steiner, R.A., et al. 2001. Galanin transgenic mice display cognitive and neurochemical deficits characteristic of Alzheimer's disease. *Proc. Natl. Acad. Sci. USA* 98: 4184-4189.
3. Kleine, B., et al. 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.

CHROMOSOMAL LOCATION

Genetic locus: GAL (human) mapping to 11q13.3; Gal (mouse) mapping to 19 A.

SOURCE

Galanin (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Galanin of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-16411 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.

PROTOCOLS

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

APPLICATIONS

Galanin (N-20) is recommended for detection of Galanin precursor and active peptide of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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); may cross-react with GALP.

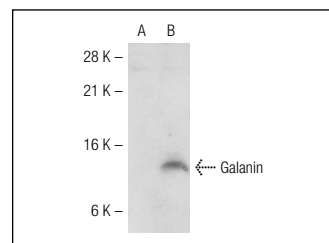
Galanin (N-20) is also recommended for detection of Galanin precursor and active peptide in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Galanin siRNA (h): sc-43797, Galanin siRNA (m): sc-72349, Galanin shRNA Plasmid (h): sc-43797-SH, Galanin shRNA Plasmid (m): sc-72349-SH, Galanin shRNA (h) Lentiviral Particles: sc-43797-V and Galanin shRNA (m) Lentiviral Particles: sc-72349-V.

Molecular Weight of Galanin: 13 kDa.

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

DATA



Galanin (N-20): sc-16411. Western blot analysis of Galanin expression in non-transfected: sc-117752 (A) and human Galanin transfected: sc-114709 (B) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

1. Liu, Z., et al. 2008. Regulation of galanin and galanin receptor 2 expression by capsaicin in primary cultured dorsal root ganglion neurons. *In Vitro Cell. Dev. Biol. Anim.* 44: 379-384.
2. Charalambous, P., et al. 2013. Regulation and effects of GDF-15 in the retina following optic nerve crush. *Cell Tissue Res.* 353: 1-8.

RESEARCH USE

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



Try **Galanin (H-11): sc-166431** or **Galanin (B-8): sc-166927**, our highly recommended monoclonal alternatives to Galanin (N-20).