SANTA CRUZ BIOTECHNOLOGY, INC.

# Galanin (h2): 293T Lysate: sc-110110

## BACKGROUND

Though originally implicated in the regulation of feeding behavior, the neuropeptide Galanin is now known to be is 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., Hohmann, J.G., Holmes, A., Wrenn, C.C., Cadd, G., Jureus, A., Clifton, D.K., Luo, M., Gutshall, M., Ma, S.Y., Mufson, E.J. and Crawley, J.N. 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., Wolfahrt, S., Lotsch, M., Gantner, T. and Rossmanith, 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.

## PRODUCT

Galanin (h2): 293T Lysate represents a lysate of human Galanin transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

## APPLICATIONS

Galanin (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive Galanin antibodies. Recommended use: 10-20 µl per lane.

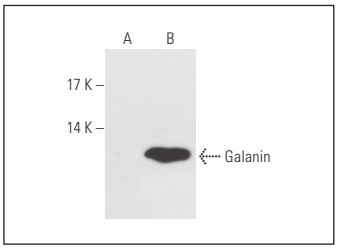
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Galanin (H-11): sc-166431 is recommended as a positive control antibody for Western Blot analysis of enhanced human Galanin expression in Galanin transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

## 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.

## DATA




Galanin (H-11): sc-166431. Western blot analysis of Galanin expression in non-transfected: sc-117752 (**A**) and human Galanin transfected: sc-110110 (**B**) 293T whole cell lysates.

## STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. 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.