Latrophilin-2 (T-17): sc-47094



The Power to Question

BACKGROUND

The Latrophilin family of G protein-coupled receptors consists of three members, Latrophilin-1, -2 and -3, each of which displays distinct tissue distribution and function. Latrophilin-1, the most characterized member of this family, acts as a receptor for α -latrotoxin, a component of venom from the black widow spider. Binding of α -latrotoxin to Latrophilin-1 triggers synaptic vesicle exocytosis via both Ca²+-dependent and -independent mechanisms, resulting in vesicle depletion. Latrophilin-1 is abundant in brain and present in endocrine cells. Latrophilin-3 is also brain-specific, whereas Latrophilin-2 expression is ubiquitous.

REFERENCES

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- Van Renterghem, C., et al. 2000. α-latrotoxin forms calcium-permeable membrane pores via interactions with Latrophilin or neurexin. Eur. J. Neurosci. 12: 3953-3962.
- 4. Sudhof, T.C., et al. 2001. α-latrotoxin and its receptors: neurexins and CIRL/Latrophilins. Annu. Rev. Neurosci. 24: 933-962.
- 5. Nicholson, G.M., et al. 2002. Spiders of medical importance in the Asia-Pacific: atracotoxin, latrotoxin and related spider neurotoxins. Clin. Exp. Pharmacol. Physiol. 29: 785-794.
- Ushkaryov, Y.A., et al. 2004. The multiple actions of black widow spider toxins and their selective use in neurosecretion studies. Toxicon 43: 527-542.

CHROMOSOMAL LOCATION

Genetic locus: LPHN2 (human) mapping to 1p31.1; Lphn2 (mouse) mapping to 3 H3.

SOURCE

Latrophilin-2 (T-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an N-terminal extracellular domain of Latrophilin-2 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-47094 P, (100 μ g 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

Latrophilin-2 (T-17) is recommended for detection of all Latrophilin-2 isoforms of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

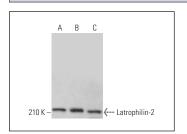
Latrophilin-2 (T-17) is also recommended for detection of all Latrophilin-2 isoforms in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for Latrophilin-2 siRNA (h): sc-60919, Latrophilin-2 siRNA (m): sc-60920, Latrophilin-2 shRNA Plasmid (h): sc-60919-SH, Latrophilin-2 shRNA Plasmid (m): sc-60920-SH, Latrophilin-2 shRNA (h) Lentiviral Particles: sc-60919-V and Latrophilin-2 shRNA (m) Lentiviral Particles: sc-60920-V.

Molecular Weight of Latrophilin-2: 163 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203, HeLa whole cell lysate: sc-2200 or Neuro-2A whole cell lysate: sc-364185.

DATA



Latrophilin-2 (T-17): sc-47094. Western blot analysis of Latrophilin-2 expression in HeLa ($\bf A$), K-562 ($\bf B$) and Neuro-2A ($\bf C$) whole cell lysates.

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.



Try **Latrophilin-2 (E-3):** sc-514197, our highly recommended monoclonal alternative to Latrophilin-2 (T-17).

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