SANTA CRUZ BIOTECHNOLOGY, INC.

Lynx1 (M-17): sc-15302

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Proper neuronal function relies on the regulation of neurotransmitter receptors, such as the nicotinic and muscarinic acetylcholine receptors. Neuronal nicotinic acetylcholine receptors define a superfamily of ligand-gated ion channels that that contribute to normal synaptic transmission in the central and peripheral nervous systems. Snake venom α-neurotoxins and mammalian Ly-6 family members can target different muscle-type and neuronal nicotinic acetylcholine receptors. Ly6/neurotoxin 1, known as Lynx1 or Ly-6 neurotoxin-like protein-1, is a secreted modulator of nicotinic acetylcholine receptors that is similar to snake venom neurotoxins and the lymphocyte antigen-6 gene (LY-6) family of the immune system. Lynx1 is expressed in large projection neurons in the hippocampus, cortex, and cerebellum, and localizes to the cerebellar soma and proximal dendrites.

REFERENCES

1. Hall, Z.W. 1999. α-neurotoxins and their relatives: foes and friends? Neuron 23: 4-5.
2. Miwa, J.M., Ibanez-Tallon, I., Crabtree, G.W., Sanchez, R., Sali, A., Role, L.W., and Heintz, N. 1999. Lynx1, an endogenous toxin-like modulator of nicotinic acetylcholine receptors in the mammalian CNS. Neuron 23: 105-114.
3. Tsetlin, V. 1999. Snake venom α-neurotoxins and other 'three-finger' proteins. Eur. J. Biochem. 264: 281-286.
4. Dwoskin, L.P. and Crooks, P.A. 2001. Competitive neuronal nicotinic receptor antagonists: a new direction for drug discovery. J. Pharmacol. Exp. Ther. 298: 395-402.
5. Dani, J.A. 2001. Overview of nicotinic receptors and their roles in the central nervous system. Biol. Psychiatry 49: 166-174.

CHROMOSOMAL LOCATION

Genetic locus: LYNX1 (human) mapping to 8q24.3; Lynx1 (mouse) mapping to 15 D3.

SOURCE

Lynx1 (M-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Lynx1 of mouse 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-15302 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.

RESEARCH USE

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

APPLICATIONS

Lynx1 (M-17) is recommended for detection of Lynx1 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Lynx1 (M-17) is also recommended for detection of Lynx1 in additional species, including equine and bovine.

Suitable for use as control antibody for Lynx1 siRNA (h): sc-106911, Lynx1 siRNA (m): sc-149173, Lynx1 shRNA Plasmid (h): sc-106911-SH, Lynx1 shRNA Plasmid (m): sc-149173-SH, Lynx1 shRNA (h) Lentiviral Particles: sc-106911-V and Lynx1 shRNA (m) Lentiviral Particles: sc-149173-V.

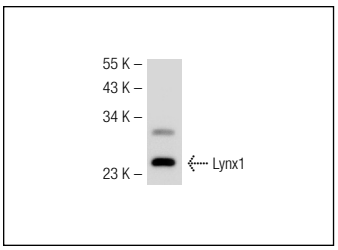
Molecular Weight of Lynx1: 11 kDa.

Positive Controls: mouse brain extract: sc-2253 or rat brain extract: sc-2392.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



Lynx1 (M-17): sc-15302. Western blot analysis of Lynx1 expression in mouse brain tissue extract.

PROTOCOLS

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