

AChR α 6 (h): 293 Lysate: sc-158229

BACKGROUND

Members of the ligand-gated ion channel receptor family are characterized by their fast transmitting response to neurotransmitters. Two important members of this family are the nicotinic acetylcholine and glutamate receptors, both of which are composed of five homologous subunits forming a transmembrane aqueous pore. These transmembrane receptors change conformation in response to their cognate neurotransmitter. Nicotinic acetylcholine receptors (AChRs) are found at the postsynaptic membrane of the neuromuscular junction and bind acetylcholine molecules, allowing ions to move through the pore. AChR α 6, also designated cholinergic nicotinic receptor α polypeptide 6, is a neuronal acetylcholine receptor protein expressed in respiratory mucosa. AChR α 6 is also selectively expressed on dopaminergic terminals, where it complexes with AChR β 2 and AChR α 4.

REFERENCES

1. Barabino, B., et al. 2001. An α 4 β 4 nicotinic receptor subtype is present in chick retina: identification, characterization and pharmacological comparison with the transfected α 4 β 4 and α 6 β 4 subtypes. *Mol. Pharmacol.* 59: 1410-1417.
2. Zoli, M., et al. 2002. Identification of the nicotinic receptor subtypes expressed on dopaminergic terminals in the rat striatum. *J. Neurosci.* 22: 8785-8789.
3. Mugnaini, M., et al. 2002. Upregulation of [3H]methyllycaconitine binding sites following continuous infusion of nicotine, without changes of α 7 or α 6 subunit mRNA: an autoradiography and *in situ* hybridization study in rat brain. *Eur. J. Neurosci.* 16: 1633-1646.
4. Keiger, C.J., et al. 2003. Nicotinic cholinergic receptor expression in the human nasal mucosa. *Ann. Otol. Rhinol. Laryngol.* 112: 77-84.
5. Vailati, S., et al. 2003. Developmental expression of heteromeric nicotinic receptor subtypes in chick retina. *Mol. Pharmacol.* 63: 1329-1337.
6. Groot-Kormelink, P.J., et al. 2004. Incomplete incorporation of tandem subunits in recombinant neuronal nicotinic receptors. *J. Gen. Physiol.* 123: 697-708.

CHROMOSOMAL LOCATION

Genetic locus: CHRNA6 (human) mapping to 8p11.21.

PRODUCT

AChR α 6 (h): 293 Lysate represents a lysate of human AChR α 6 transfected 293 cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

APPLICATIONS

AChR α 6 (h): 293 Lysate is suitable as a Western Blotting positive control for human reactive AChR α 6 antibodies. Recommended use: 10-20 μ l per lane.

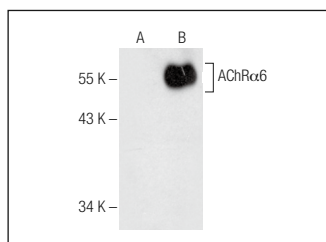
Control 293 Lysate: sc-110760 is available as a Western Blotting negative control lysate derived from non-transfected 293 cells.

AChR α 6 (G-4): sc-376966 is recommended as a positive control antibody for Western Blot analysis of enhanced human AChR α 6 expression in AChR α 6 transfected 293 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-IgG κ BP-HRP: sc-516102 or m-IgG κ 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



AChR α 6 (G-4): sc-376966. Western blot analysis of AChR α 6 expression in non-transfected: sc-110760 (A) and human AChR α 6 transfected: sc-158229 (B) 293 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.