

AChR β 2 (D-23): sc-130936

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. Glutamate receptors are found in the postsynaptic membrane of cells in the central nervous system. The activity that is generated at the synapse by the binding of acetylcholine is terminated by acetylcholinesterase, an enzyme that rapidly hydrolyzes acetylcholine.

REFERENCES

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2. Betz, H. 1990. Ligand-gated ion channels in the brain: the amino acid receptor superfamily. *Neuron* 5: 383-392.
3. Baenziger, J.E., Miller, K.W., McCarthy, M.P. and Rothschild, K.J. 1992. Probing conformational changes in the nicotinic acetylcholine receptor by Fourier transform infrared difference spectroscopy. *Biophys. J.* 62: 64-66.
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CHROMOSOMAL LOCATION

Genetic locus: CHRN2 (human) mapping to 1q21.3; Chrn2 (mouse) mapping to 3 F1.

SOURCE

AChR β 2 (D-23) is an affinity purified rabbit polyclonal antibody raised against synthetic AChR β 2 peptide of human origin.

PRODUCT

Each vial contains 50 μ g IgG in 500 μ l PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

AChR β 2 (D-23) is recommended for detection of AChR β 2 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for AChR β 2 siRNA (h): sc-42536, AChR β 2 siRNA (m): sc-42537, AChR β 2 shRNA Plasmid (h): sc-42536-SH, AChR β 2 shRNA Plasmid (m): sc-42537-SH, AChR β 2 shRNA (h) Lentiviral Particles: sc-42536-V and AChR β 2 shRNA (m) Lentiviral Particles: sc-42537-V.

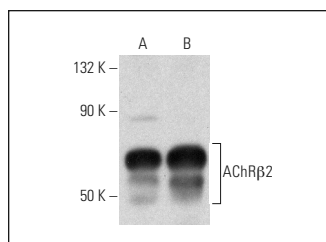
Molecular Weight of AChR β 2: 50 kDa.

Positive Controls: BC₃H1 cell lysate: sc-2299, Daudi cell lysate: sc-2415 or Sol8 cell lysate: sc-2249.

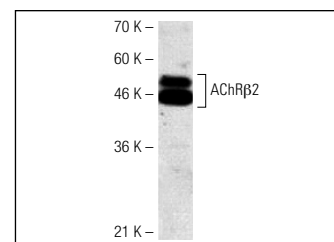
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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).

DATA



AChR β 2 (D-23): sc-130936. Western blot analysis of AChR β 2 expression in PC-12 (A) and Jurkat (B) whole cell lysates.



AChR β 2 (D-23): sc-130936. Western blot analysis of AChR β 2 expression in Daudi whole cell lysate.

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 **AChR β 2 (270): sc-58596**, our highly recommended monoclonal alternative to AChR β 2 (D-23).