

## Produktinformation



Forschungsprodukte & Biochemikalien



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Diagnostik & molekulare Diagnostik



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# AChRα5 (h5): 293 Lysate: sc-158228



The Power to Question

#### **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. AChR $\alpha$ 5, also known as LNCR2 or CHRNA5 (cholinergic receptor, nicotinic, alpha 5), is a 468 amino acid multi-pass membrane protein belonging to the ligand-gated ionic channel family and is involved in the mediation of fast signal transmission at synapses.

#### **REFERENCES**

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#### **CHROMOSOMAL LOCATION**

Genetic locus: CHRNA5 (human) mapping to 15q25.1

#### **PRODUCT**

AChR $\alpha$ 5 (h5): 293 Lysate represents a lysate of human AChR $\alpha$ 5 transfected 293 cells and is provided as 100  $\mu$ g protein in 200  $\mu$ l SDS-PAGE buffer.

#### **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.

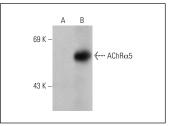
#### **APPLICATIONS**

AChR $\alpha$ 5 (h5): 293 Lysate is suitable as a Western Blotting positive control for human reactive AChR $\alpha$ 5 antibodies. Recommended use: 10-20  $\mu$ l per lane.

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

AChR $\alpha$ 5 (268): sc-58606 is recommended as a positive control antibody for Western Blot analysis of enhanced human AChR $\alpha$ 5 expression in AChR $\alpha$ 5 transfected 293 cells (starting dilution 1:100, dilution range 1:100-1:1,000).

#### **DATA**



AChR $\alpha$ 5 (268): sc-58606. Western blot analysis of AChR $\alpha$ 5 expression in non-transfected: sc-110760 (**A**) and human AChR $\alpha$ 5 transfected: sc-158228 (**B**) 293 whole self-like transfected: sc-158228 (**B**) 293

#### **RESEARCH USE**

For research use only, not for use in diagnostic procedures

#### **PROTOCOLS**

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