

AChR γ/δ (7): sc-65758

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 γ and AChR δ are members of the acetylcholine receptor family that play a role in ligand binding and neuromuscular organogenesis. Mutations in the gene that encodes AChR γ result in Escobar syndrome and a lethal form of multiple pterygium syndrome. Mutations in the gene encoding AChR δ are a cause of congenital myasthenic syndrome fast-channel type (FCCMS) and congenital myasthenic syndrome slow-channel type (SCCMS).

REFERENCES

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SOURCE

AChR γ/δ (7) is a rat monoclonal antibody raised against denatured, purified AChR of *Torpedo* origin.

PRODUCT

Each vial contains 200 μ g IgG₁ in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

AChR γ/δ (7) is recommended for detection of nicotinic AChR γ/δ of *torpedo*, *xenopus*, *rana* and canine origin by immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)].

Molecular Weight of AChR γ : 58 kDa.

Molecular Weight of AChR δ : 60 kDa.

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.

PROTOCOLS

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