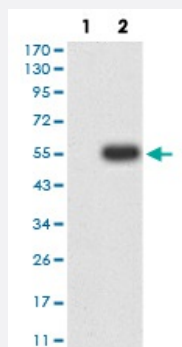


CHRNA7 monoclonal antibody, clone 7F10G1

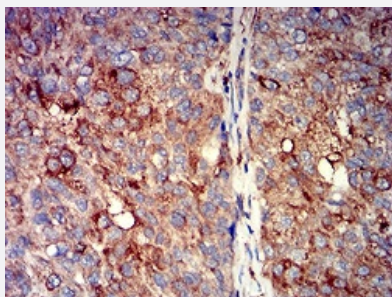
Catalog # MAB17545 Size 100 ug

Applications



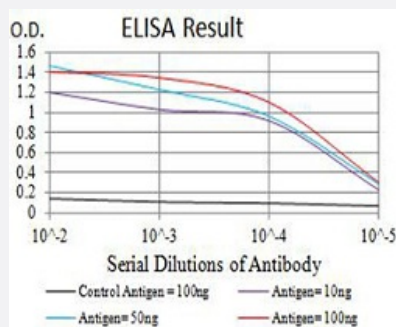
Western Blot (Transfected lysate)

Western blot analysis of (1) HEK293 cells, (2) CHRNA7-hlgGfc transfected HEK293 cell lysate.



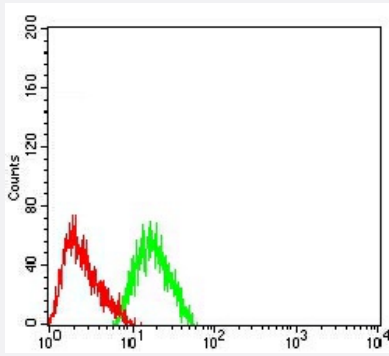
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemical staining of paraffin-embedded bladder cancer tissues with CHRNA7 monoclonal antibody.



Enzyme-linked Immunoabsorbent Assay

ELISA analysis of CHRNA7 monoclonal antibody, clone 7F10G1.



Flow Cytometry

Flow cytometric analysis of SH-SY5Y cells with CHRNA7 monoclonal antibody (green) and negative control (red).

Specification

Product Description	Mouse monoclonal antibody raised against recombinant human CHRNA7.
Immunogen	Recombinant protein corresponding to amino acid 52-259 of human CHRNA7 from <i>E. coli</i> .
Host	Mouse
Theoretical MW (kDa)	56.4
Reactivity	Human
Form	Liquid
Isotype	IgG1
Recommend Usage	ELISA (1:10000) Western Blot (1:500-1:2000) Immunocytochemistry Flow Cytometry (1:200-1:400) Immunohistochemistry (1:200-1:1000) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (0.05% sodium azide).
Storage Instruction	Store at 4°C. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- Western Blot (Transfected lysate)

Western blot analysis of (1) HEK293 cells, (2) CHRNA7-hlgGFc transfected HEK293 cell lysate.

- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

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Flow cytometric analysis of SH-SY5Y cells with CHRNA7 monoclonal antibody (green) and negative control (red).

Gene Info — CHRNA7

Entrez GeneID [1139](#)

Gene Name CHRNA7

Gene Alias CHRNA7-2, NACHRA7

Gene Description cholinergic receptor, nicotinic, alpha 7

Omim ID [118511](#)

Gene Ontology [Hyperlink](#)

Gene Summary

The nicotinic acetylcholine receptors (nAChRs) are members of a superfamily of ligand-gated ion channels that mediate fast signal transmission at synapses. The nAChRs are thought to be hetero-pentamers composed of homologous subunits. The proposed structure for each subunit is a conserved N-terminal extracellular domain followed by three conserved transmembrane domains, a variable cytoplasmic loop, a fourth conserved transmembrane domain, and a short C-terminal extracellular region. The protein encoded by this gene forms a homo-oligomeric channel, displays marked permeability to calcium ions and is a major component of brain nicotinic receptors that are blocked by, and highly sensitive to, alpha-bungarotoxin. Once this receptor binds acetylcholine, it undergoes an extensive change in conformation that affects all subunits and leads to opening of an ion-conducting channel across the plasma membrane. This gene is located in a region identified as a major susceptibility locus for juvenile myoclonic epilepsy and a chromosomal location involved in the genetic transmission of schizophrenia. An evolutionarily recent partial duplication event in this region results in a hybrid containing sequence from this gene and a novel FAM7A gene. [provided by RefSeq]

Other Designations

a7 nicotinic acetylcholine receptor|alpha 7 neuronal nicotinic acetylcholine receptor|alpha-7 nicotinic cholinergic receptor subunit|cholinergic receptor, nicotinic, alpha polypeptide 7|neuronal acetylcholine receptor protein, alpha-7 chain

Pathway

- [Calcium signaling pathway](#)

Disease

- [Alzheimer disease](#)
- [Angelman syndrome](#)
- [Arousal](#)
- [Attention](#)
- [Attention Deficit Disorder with Hyperactivity](#)
- [Auditory Perceptual Disorders](#)
- [Autistic Disorder](#)
- [Bipolar Disorder](#)
- [Chromosome Deletion](#)
- [Cognition](#)
- [Cognition Disorders](#)
- [Depressive Disorder](#)
- [Disease Progression](#)
- [Epilepsy](#)
- [Genetic Predisposition to Disease](#)
- [Hypercholesterolemia](#)
- [Lung Neoplasms](#)
- [Memory Disorders](#)
- [Mental Disorders](#)
- [Mental Retardation](#)

- [Mental Status Schedule](#)
- [NARP](#)
- [Obesity](#)
- [Ovarian Failure](#)
- [Peripheral Vascular Diseases](#)
- [Personality Inventory](#)
- [Polycystic Ovary Syndrome](#)
- [Prader-Willi syndrome](#)
- [Psychiatric Status Rating Scales](#)
- [Psychological Tests](#)
- [Psychotic Disorders](#)
- [Puberty](#)
- [Schizophrenia](#)
- [Schizophrenic Psychology](#)
- [Sensation Disorders](#)
- [Thrombophilia](#)
- [Tobacco Use Disorder](#)
- [Wechsler Scales](#)
- [Weight Gain](#)