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CHRNA6

Purified Mouse Monoclonal Antibody
Catalog # AO2555a

Product Information

Application	WB, IHC, ICC, E
Primary Accession	Q15825
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	5B6G8
Isotype	Mouse IgG1
Calculated MW	56898
Immunogen	Purified recombinant fragment of human CHRNA6 (AA: 26-239) expressed in E. Coli.
Formulation	Purified antibody in PBS with 0.05% sodium azide

Additional Information

Gene ID	8973
Other Names	CHNRA6
Dilution	WB~~ 1/500 - 1/2000 IHC~~1:100~500 ICC~~ 1/100 - 1/500 E~~ 1/10000
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	CHRNA6 is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CHRNA6 (HGNC:15963)
Function	Component of neuronal acetylcholine receptors (nAChRs) that function as pentameric, ligand-gated cation channels with high calcium permeability among other activities. nAChRs are excitatory neurotrasnmitter receptors formed by a collection of nAChR subunits known to mediate synaptic transmission in the nervous system and the neuromuscular junction. Each nAchR subunit confers differential attributes to channel properties, including activation, deactivation and desensitization kinetics, pH sensitivity, cation permeability, and binding to allosteric modulators (Probable). CHRNA6 forms pentameric channels with CHRNB2, CHRNB3 and CHRNA4 that exhibit high

sensitivity to ACh and nicotine and are predominantly expressed in only a few brain areas, including dopaminergic neurons, norepirephrine neurons and cells of the visual system (PubMed:16835356). nAChrs containing CHRNA6 subunits mediate endogenous cholinergic modulation of dopamine and gamma-aminobutyric acid (GABA) release in response to nicotine at nerve terminals.

Cellular Location Synaptic cell membrane {ECO:0000250|UniProtKB:Q9R0W9}; Multi-pass membrane protein

References

1.Mol Brain. 2014 May 2;7:35. 2.Mol Psychiatry. 2010 Jan;15(1):6-8.

Images

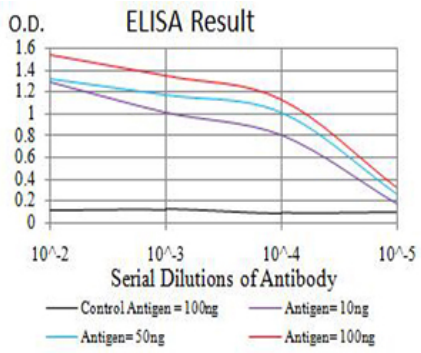


Figure 1:Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line:Antigen (100 ng)

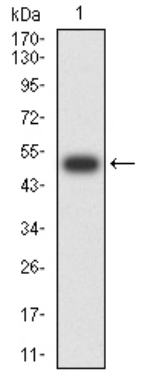


Figure 2:Western blot analysis using CHRNA6 mAb against human CHRNA6 (AA: 26-239) recombinant protein. (Expected MW is 51.2 kDa)

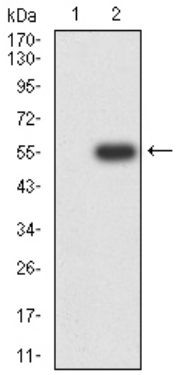
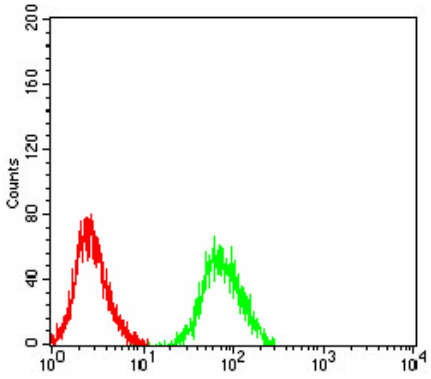


Figure 3:Western blot analysis using CHRNA6 mAb against HEK293 (1) and CHRNA6 (AA: 26-239)-hIgGFc transfected HEK293 (2) cell lysate.

Figure 5:Flow cytometric analysis of SH-SY5Y cells using CHRNA6 mouse mAb (green) and negative control (red).



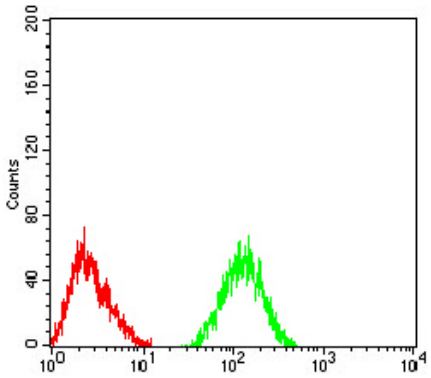


Figure 6:Flow cytometric analysis of SK-N-SH cells using CHRNA6 mouse mAb (green) and negative control (red).

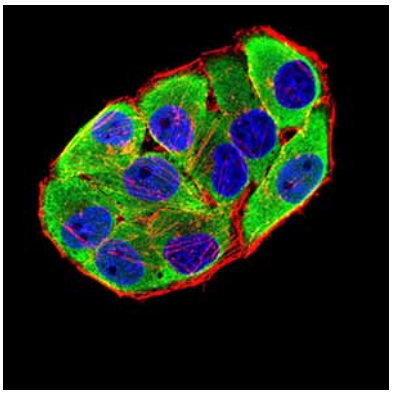


Figure 4:Immunofluorescence analysis of Hela cells using CHRNA6 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor- 555 phalloidin. Secondary antibody from Fisher (Cat#: 35503)

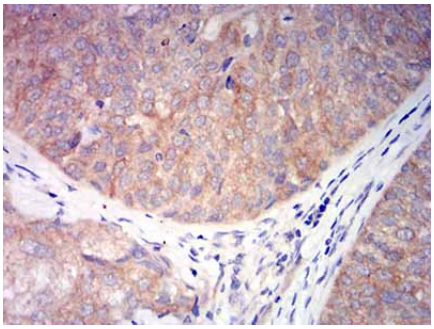


Figure 7:Immunohistochemical analysis of paraffin-embedded bladder cancer tissues using CHRNA6 mouse mAb with DAB staining.