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CHRNA5

Purified Mouse Monoclonal Antibody
Catalog # AO2579a

Product Information

Application	WB, IHC, ICC, E
Primary Accession	P30532
Reactivity	Human, Rat
Host	Mouse
Clonality	Monoclonal
Clone Names	2D2D10
Isotype	Mouse IgG1
Calculated MW	53054
Immunogen	Purified recombinant fragment of human CHRNA5 (AA: extra 23-254) expressed in E. Coli.
Formulation	Purified antibody in PBS with 0.05% sodium azide

Additional Information

Gene ID	1138
Other Names	LNCR2
Dilution	WB~~ 1/500 - 1/2000 IHC~~1:100~500 ICC~~N/A 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	CHRNA5 is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CHRNA5 (HGNC:1959)
Synonyms	NACHRA5
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 (PubMed:20881005, PubMed:8663494). Has an accessory rather than functional role and is only able to form functional nAChRs when co-assembled with another beta subunit (PubMed:20881005, PubMed:8663494). Participates in pentameric assemblies along with CHRNA3, CHRNA4, CHRNB2 and CHRNB4 (PubMed:20881005, PubMed:8663494). Increases receptor sensitivity to acetylcholine and nicotine when associated with CHRNA4 and CHRNB2 (PubMed:8663494). Plays a role in nicotine addiction (PubMed:20881005).

Cellular Location

Synaptic cell membrane {ECO:0000250|UniProtKB:P32297}; Multi-pass membrane protein. Cell membrane {ECO:0000250|UniProtKB:P32297}; Multi-pass membrane protein

References

1.Asian Pac J Cancer Prev. 2015;16(15):6685-90.2.Nicotine Tob Res. 2016 Feb;18(2):212-20.

Images

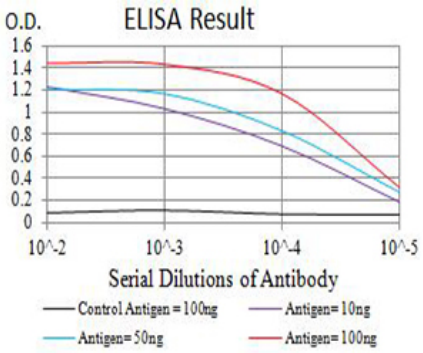


Figure 1:Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line:Antigen (100 ng)

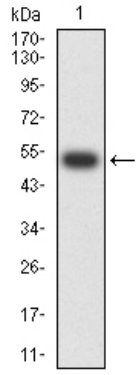


Figure 2:Western blot analysis using CHRNA5 mAb against human CHRNA5 (AA: 23-254) recombinant protein. (Expected MW is 52.5 kDa)

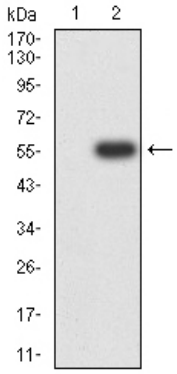


Figure 3:Western blot analysis using CHRNA5 mAb against HEK293 (1) and CHRNA5 (AA: 23-254)-hIgGFc transfected HEK293 (2) cell lysate.

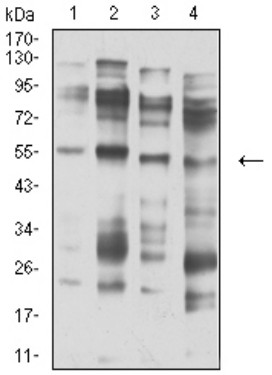


Figure 4:Western blot analysis using CHRNA5 mouse mAb against membrane protein lysate of C6 (1), membrane protein lysate of SK-N-SH (2), membrane protein lysate of C6 (3), and C6 (4) cell lysate.

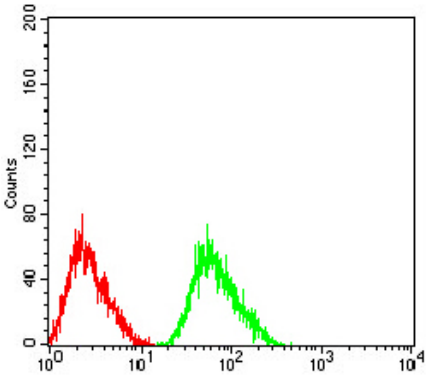


Figure 5:Flow cytometric analysis of SK-N-SH cells using CHRNA5 mouse mAb (green) and negative control (red).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.