For Research Use Only

CHRNA7 (48 kDa) Recombinant antibody

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Catalog Number:82848-3-RR

Featured Product

Basic Information

Catalog Number: GenBank Accession Number: **Purification Method:** 82848-3-RR BC037571 Protein A purification

GeneID (NCBI): CloneNo.: 100ul, Concentration: 1000 ug/ml by 1139 2A10

Nanodrop: **UNIPROT ID:** Recommended Dilutions: P36544 WB 1:1000-1:5000 Rabbit IHC 1:250-1:1000 Full Name:

Isotype: cholinergic receptor, nicotinic, alpha 7

IgG Calculated MW: Immunogen Catalog Number: 502 aa, 56 kDa AG15980 Observed MW: ~50 kDa

Applications

Positive Controls: Tested Applications:

WB, IHC, ELISA WB: rat brain tissue, Jurkat cells

Species Specificity: IHC: mouse brain tissue, rat dorsal root ganglion human, mouse, rat

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Background Information

Nicotinic acetylcholine receptors (nAChRs) are cholinergic receptors that form ligand-gated ion channels that mediate fast signal transmission at synapses. CHRNA7 (neuronal acetylcholine receptor subunit alpha-7) forms a homo-oligomeric channel, displays marked permeability to calcium ions and is a major component of brain $nicotinic\ receptors\ that\ are\ blocked\ by,\ and\ highly\ sensitive\ to,\ alpha-bungarotoxin.\ CHRNA7,\ so\ that\ like\ CHRNA7,$ the epithelial CHRFAM7A ORF encodes a protein (48 kDa) that differs from the CHRNA7 (58 kDa) by a distinct amino terminus and molecular weight.(PMID: 25473097)

Storage

Store at -20°C. Stable for one year after shipment.

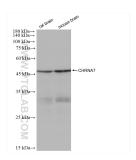
Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

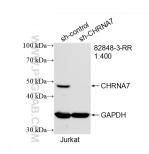
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

Selected Validation Data



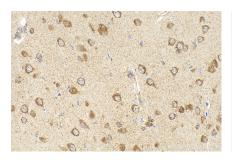
Various lysates were subjected to SDS PAGE followed by western blot with 82848-3-RR (CHRNA7 antibody) at dilution of 1:2500 incubated at room temperature for 1.5 hours.



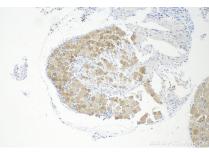
WB result of CHRNA 7 antibody (82848-3-RR; 1:400; incubated at room temperature for 1.5 hours) with sh-Control and sh-CHRNA 7 transfected Jurkat cells.



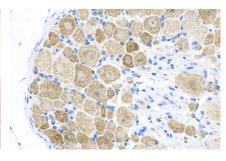
Immunohistochemical analysis of paraffinembedded mouse brain tissue slide using 82848-3-RR (CHRNA7 antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



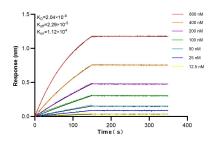
Immunohistochemical analysis of paraffinembedded mouse brain tissue slide using 82848-3-RR (CHRNA7 antibody) at dilution of 1:500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded rat dorsal root ganglion tissue slide using 82848-3-RR (CHRNA7 antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded rat dorsal root ganglion tissue slide using 82848-3-RR (CHRNA7 antibody) at dilution of 1:500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Biolayer interferometry (BL1) kinetic assays of 82848-3-RR against Human CHRNA7 (48 kDa) were performed. The affinity constant is 2.04 nM.