

For Research Use Only

# CHRNA7 Recombinant antibody

Catalog Number: 82848-4-RR



## Basic Information

<b>Catalog Number:</b> 82848-4-RR	<b>GenBank Accession Number:</b> BC037571	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ul , Concentration: 1000 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 1139	<b>CloneNo.:</b> 240117D12
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P36544	<b>Recommended Dilutions:</b> WB 1:500-1:2000
<b>Isotype:</b> IgG	<b>Full Name:</b> cholinergic receptor, nicotinic, alpha 7	
<b>Immunogen Catalog Number:</b> AG15980	<b>Calculated MW:</b> 502 aa, 56 kDa	
	<b>Observed MW:</b> 50 kDa, 56 kDa	

## Applications

<b>Tested Applications:</b> WB, FC (Intra), ELISA	<b>Positive Controls:</b> WB : rat brain tissue, mouse brain tissue
<b>Species Specificity:</b> human, mouse, rat	

## 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 CHRFA7A ORF encodes a protein (48 kDa) that differs from the CHRNA7 (58 kDa) by a distinct amino terminus and molecular weight.(PMID: 25473097)

## Storage

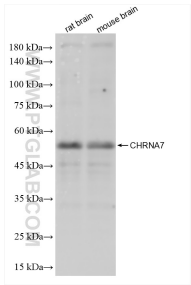
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
**Aliquoting is unnecessary for -20°C storage**

\*\*\* 20ul sizes contain 0.1% BSA

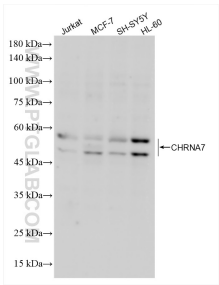
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

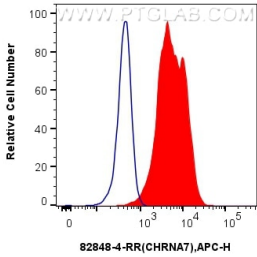
Selected Validation Data



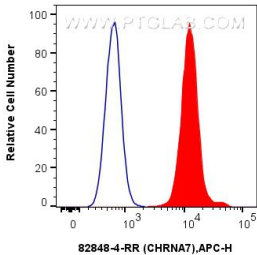
Various lysates were subjected to SDS PAGE followed by western blot with 82848-4-RR (CHRNA7 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



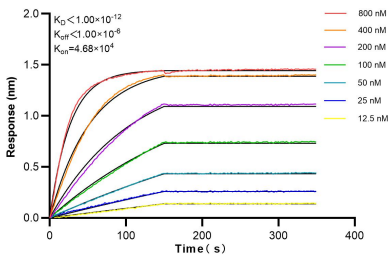
Various lysates were subjected to SDS PAGE followed by western blot with 82848-4-RR (CHRNA7 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



1x10<sup>6</sup> SH-SY5Y cells were intracellularly stained with 0.25 ug Chrna7 Recombinant Antibody (82848-4-RR, Clone:240117D12) and APC-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Isotype Control (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



1x10<sup>6</sup> Jurkat cells were intracellularly stained with 0.25 ug CHRNA7 Recombinant antibody (82848-4-RR, Clone:240117D12) and APC-Conjugated Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Isotype Control (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



Biolayer interferometry (BLI) kinetic assays of 82848-4-RR against Human CHRNA7 were performed. The affinity constant is below 1 pM.