



Rabbit Anti-CHRNA7 antibody

SL1049R

Product Name:	CHRNA7
Chinese Name:	烟碱型乙酰胆碱受体 α 7抗体
Alias:	CHRFAM7A; ACHA7_HUMAN; cholinergic receptor, nicotinic, alpha 7; Neuronal acetylcholine receptor subunit alpha-7; ACHR ALPHA 7; AChR alpha 7 Receptor; Acra7; ALPHA-7NACHR; ALPHA7; ALPHA7 NICOTINIC ACETYLCHOLINE RECEPTOR; Alpha7 nicr; BTX; CHRNA7; CHRNA7-2; NACHR alpha7; NACHRA7; NARAD; Alpha 7 neuronal nicotinic acetylcholine receptor FAM7A hybrid; CHRNA7 (cholinergic receptor nicotinic alpha 7 exons 5 10) and FAM7A (family with sequence similarity 7A exons A E) fusion; CHRNA7; CHRNA7 DR1; CHRNA7 FAM7A fusion; CHRNA7 FAM7A fusion protein; D 10; D10; MGC120482; MGC120483.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	55kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human CHRNA7:441-502/502<Cytoplasmic>
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

PubMed:[PubMed](#)

The Nicotinic Acetylcholine Receptors are members of a superfamily of ligand gated ion channels that mediate fast signal transmission at synapses. These receptors 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 Nicotinic Acetylcholine Receptor 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. 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.

Function:

After binding acetylcholine, the AChR responds by an extensive change in conformation that affects all subunits and leads to opening of an ion-conducting channel across the plasma membrane. The channel is blocked by alpha-bungarotoxin.

Subunit:

Homopentamer. Interacts with RIC3; which is required for proper folding and assembly.

Subcellular Location:

Cell junction, synapse, postsynaptic cell membrane; Multi-pass membrane protein. Cell membrane; Multi-pass membrane protein.

Similarity:

Belongs to the ligand-gated ion channel (TC 1.A.9) family. Acetylcholine receptor (TC 1.A.9.1) subfamily. Alpha-7/CHRNA7 sub-subfamily.

SWISS:

P36544

Gene ID:

1139

Database links:

[Entrez Gene: 1139 Human](#)

[Entrez Gene: 374001 Chicken](#)

[Entrez Gene: 282178 Cow](#)

[Entrez Gene: 11441 Mouse](#)

[Entrez Gene: 25302 Rat](#)

Product Detail:

[Omin: 118511](#) Human

[SwissProt: P22770](#) Chicken

[SwissProt: P54131](#) Cow

[SwissProt: P36544](#) Human

[SwissProt: Q8IUZ4](#) Human

[SwissProt: P49582](#) Mouse

[SwissProt: Q05941](#) Rat

[Unigene: 88](#) Cow

[Unigene: 511772](#) Human

[Unigene: 113464](#) Mouse

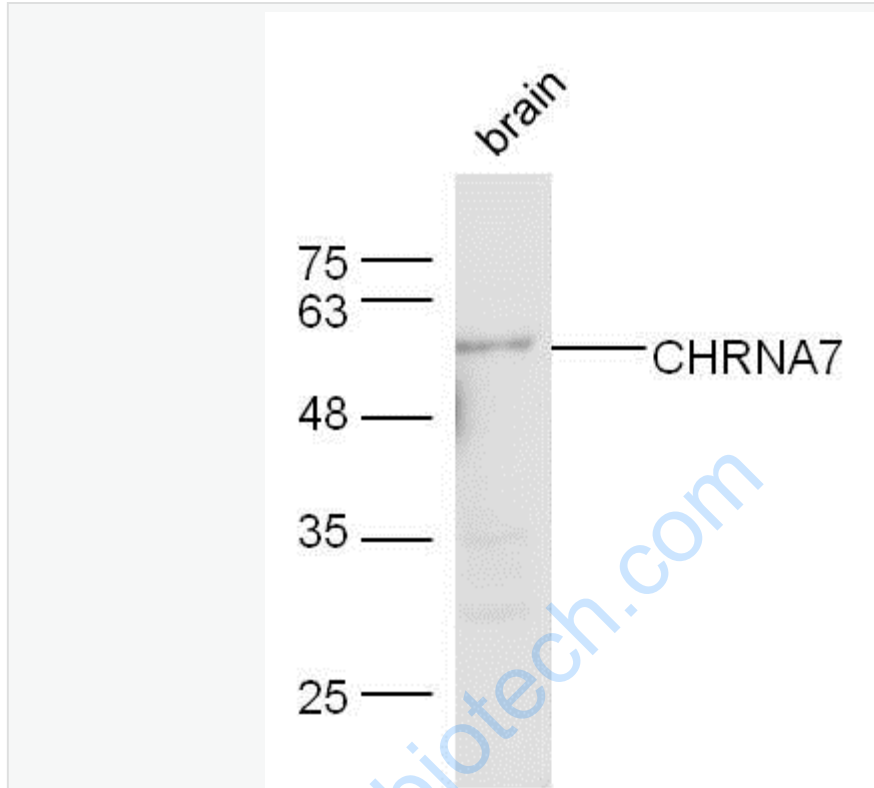
[Unigene: 9698](#) Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

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Picture:



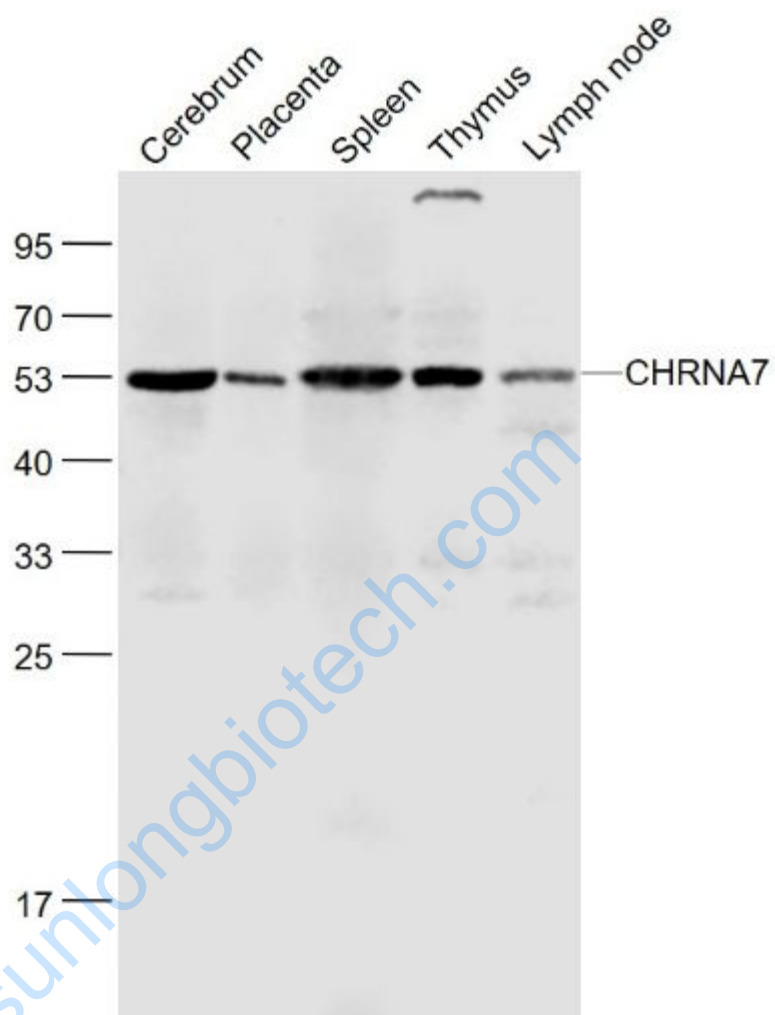
Sample: Rrain(Mouse) lysate at 30ug;

Primary: Anti- CHRNA7 (SL1049R) at 1:300 dilution ;

Secondary: HRP conjugated Goat-Anti-rabbit IgG(SL1049R) at 1: 5000 dilution;

Predicted band size: 55 kD

Observed band size: 55kD



Sample:

Cerebrum (Mouse) Lysate at 40 ug

Placenta (Mouse) Lysate at 40 ug

Spleen (Mouse) Lysate at 40 ug

Thymus (Mouse) Lysate at 40 ug

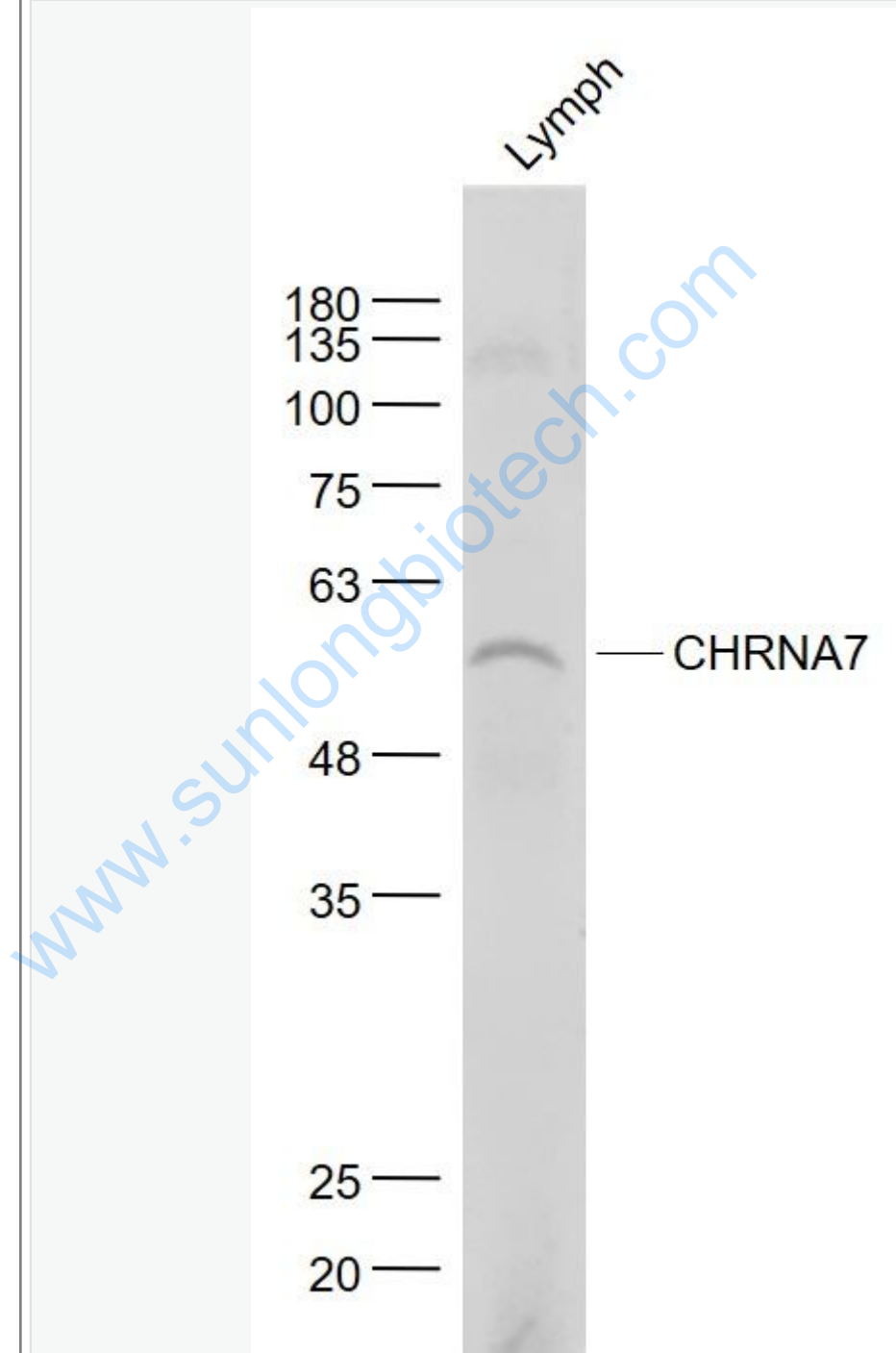
Lymph node (Mouse) Lysate at 40 ug

Primary: Anti- CHRNA7 (SL1049R) at 1/500 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 55 kD

Observed band size: 53 kD



Sample:

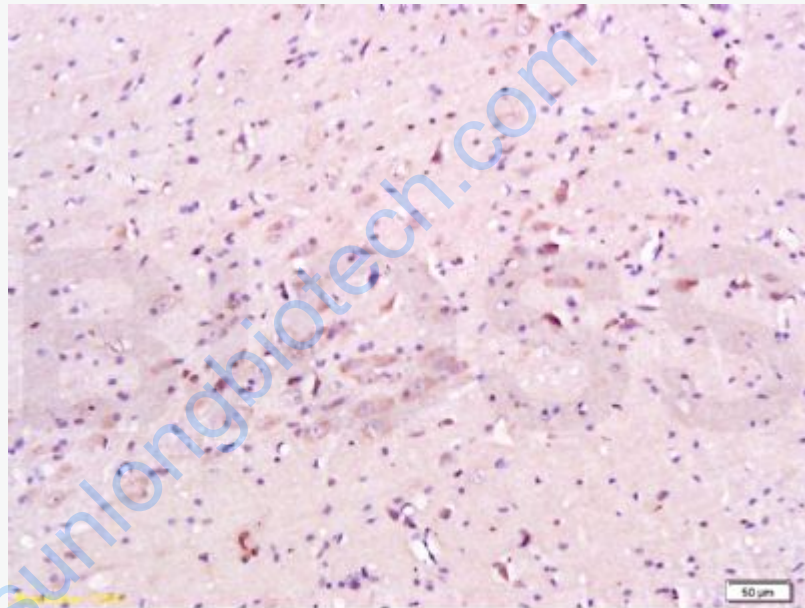
Lymph (Mouse) Lysate at 40 ug

Primary: Anti- CHRNA7 (SL1049R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 55 kD

Observed band size: 55 kD



bs-1049R Anti-CHRNA7

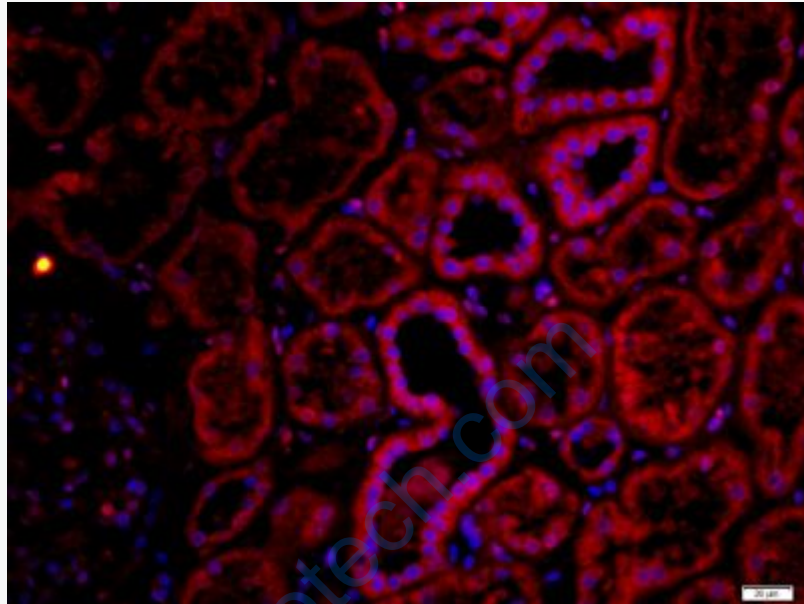
Formalin-fixed and paraffin-embedded mouse brain tissue labeled with Rabbit Anti-CHRNA7 Polyclonal Antibody, Unconjugated(bs-1049R) at 1:300 followed by conjugation to the secondary antibody and DAB staining

Tissue/cell: mouse brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-CHRNA7 Polyclonal Antibody, Unconjugated(SL1049R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and

DAB(C-0010) staining



Tissue/cell: human kidney tissue;4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min;

Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-CHRNA7 Polyclonal Antibody, Unconjugated(SL1049R) 1:200, overnight at 4°C; The secondary antibody was Goat Anti-Rabbit IgG, Cy3 conjugated(SL1049R)used at 1:200 dilution for 40 minutes at 37°C.

DAPI(5ug/ml,blue,C-0033) was used to stain the cell nuclei