



Rabbit Anti-PPP2R2B/PP2A-B55 antibody

SL11749R

Product Name:	PPP2R2B/PP2A-B55
Chinese Name:	蛋白质磷酸酶2A-B55抗体
Alias:	2ABB_HUMAN; B55 beta; Beta isoform of regulatory subunit B55 protein phosphatase 2; MGC24888; PP2A B Subunit B Alpha Isoform; PP2A B55beta; PP2A PR55B; PP2A subunit B B beta isoform; PP2A subunit B B55 beta isoform; PP2A subunit B isoform B55 beta; PP2A subunit B isoform B55-beta; PP2A subunit B isoform beta; PP2A subunit B isoform PR55 beta; PP2A subunit B isoform PR55-beta; PP2A subunit B isoform R2 beta; PP2A subunit B isoform R2-beta; PP2A subunit B PR55 beta isoform; PP2A subunit B R2 beta isoform; Ppp2r2b; PR2AB beta; PR2AB55 beta; PR2APR55 beta; PR52B; PR55 beta; Protein phosphatase 2 (formerly 2A) regulatory subunit B (PR 52) beta isoform; Protein phosphatase 2 (formerly 2A) regulatory subunit B beta isoform; Protein phosphatase 2 regulatory subunit B; Protein phosphatase 2 regulatory subunit B beta isoform; SCA 12; SCA12; Serine/threonine protein phosphatase 2A 55 kDa regulatory subunit B beta isoform; Serine/Threonine Protein Phosphatase 2A 56kDa Regulatory Subunit Alpha Isoform; Serine/threonine protein phosphatase 2A neuronal isoform; Serine/threonine-protein phosphatase 2A 55 kDa regulatory subunit B beta isoform.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Dog,Pig,Rabbit,Sheep,
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:	52kDa
Cellular localization:	cytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human PPP2R2B/PP2A-B55:51-130/443

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
Product Detail:	<p>In eukaryotes, the phosphorylation and dephosphorylation of proteins on serine and threonine residues is an essential means of regulating a broad range of cellular functions, including division, homeostasis and apoptosis. A group of proteins that are intimately involved in this process are the protein phosphatases. In general, the protein phosphatase (PP) holoenzyme is a trimeric complex composed of a regulatory subunit, a variable subunit and a catalytic subunit. Four major families of protein phosphatase catalytic subunits have been identified, designated PP1, PP2A, PP2B (calcineurin) and PP2C. An additional protein phosphatase catalytic subunit, PPX (also known as PP4) is a putative member of a novel PP family. The PP2A family comprises subfamily members PP2A[?] and PP2A[]]. The PP2A catalytic subunit associates with a variety of regulatory subunits. The B family of regulatory subunits (including B55, B56 and PR72/130 subfamilies) is believed to participate in substrate specificity and catalytic activity. PP2A-B55, also known as PP2A regulatory subunit subfamily B55 or PP2A-B1, is a B subfamily consisting of four B55 isoforms (Alpha,Beta, Gamma and Delta) encoded by four distinct genes.</p> <p>Function: The B regulatory subunit might modulate substrate selectivity and catalytic activity, and also might direct the localization of the catalytic enzyme to a particular subcellular compartment. Within the PP2A holoenzyme complex, isoform 2 is required to promote proapoptotic activity (By similarity). Isoform 2 regulates neuronal survival through the mitochondrial fission and fusion balance.</p> <p>Subunit: PP2A consists of a common heterodimeric core enzyme, composed of a 36 kDa catalytic subunit (subunit C) and a 65 kDa constant regulatory subunit (PR65 or subunit A), that associates with a variety of regulatory subunits. Proteins that associate with the core dimer include three families of regulatory subunits B (the R2/B/PR55/B55, R3/B''/PR72/PR130/PR59 and R5/B'/B56 families), the 48 kDa variable regulatory subunit, viral proteins, and cell signaling molecules.</p> <p>Subcellular Location: Cytoplasm. cytoskeleton. Membrane and Cytoplasm. Mitochondrion. Mitochondrion outer membrane. Under basal conditions, localizes to both cytosolic and mitochondrial compartments. Relocalizes from the cytosolic to the mitochondrial compartment during apoptosis. Its targeting to the outer mitochondrial membrane (OMM) involves an association with import receptors of the TOM complex and is required to promote proapoptotic activity.</p>

Tissue Specificity:

Brain.

DISEASE:

Defects in PPP2R2B are the cause of spinocerebellar ataxia type 12 (SCA12) [MIM:604326]. Spinocerebellar ataxia is a clinically and genetically heterogeneous group of cerebellar disorders. Patients show progressive incoordination of gait and often poor coordination of hands, speech and eye movements, due to degeneration of the cerebellum with variable involvement of the brainstem and spinal cord. SCA12 is an autosomal dominant cerebellar ataxia (ADCA).

Similarity:

Belongs to the phosphatase 2A regulatory subunit B family.
Contains 7 WD repeats.

SWISS:

Q00005

Gene ID:

5521

Database links:

[Entrez Gene: 5521](#)Human

[Entrez Gene: 72930](#)Mouse

[Entrez Gene: 60660](#)Rat

[Omim: 604325](#)Human

[SwissProt: Q00005](#)Human

[SwissProt: Q6ZWR4](#)Mouse

[SwissProt: P36877](#)Rat

[Unigene: 655213](#)Human

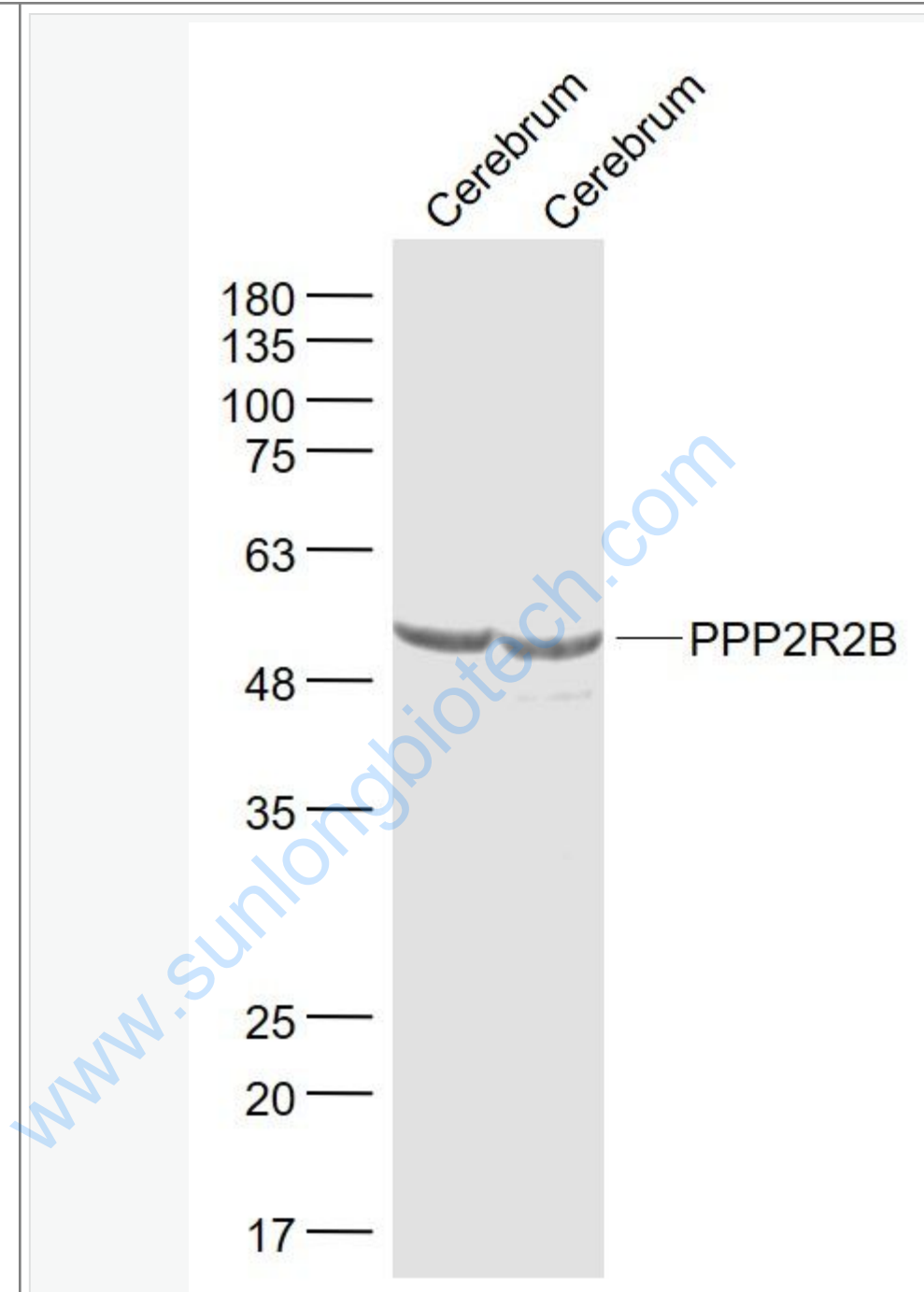
[Unigene: 26134](#)Mouse

[Unigene: 44437](#)Rat

Important Note:

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

Picture:



Sample:

Cerebrum (Mouse) Lysate at 40 ug

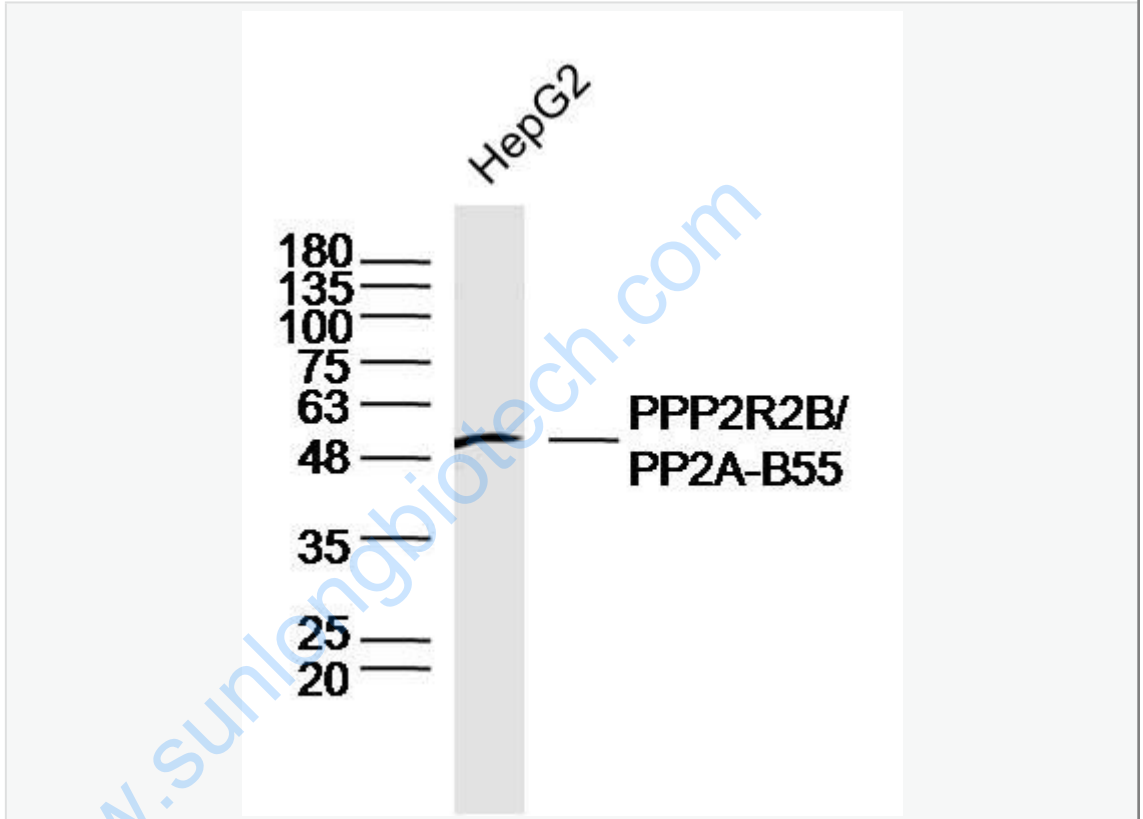
Cerebrum (Rat) Lysate at 40 ug

Primary: Anti- PPP2R2B (SL11749R) at 1/1000 dilution

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

Predicted band size: 52 kD

Observed band size: 52 kD



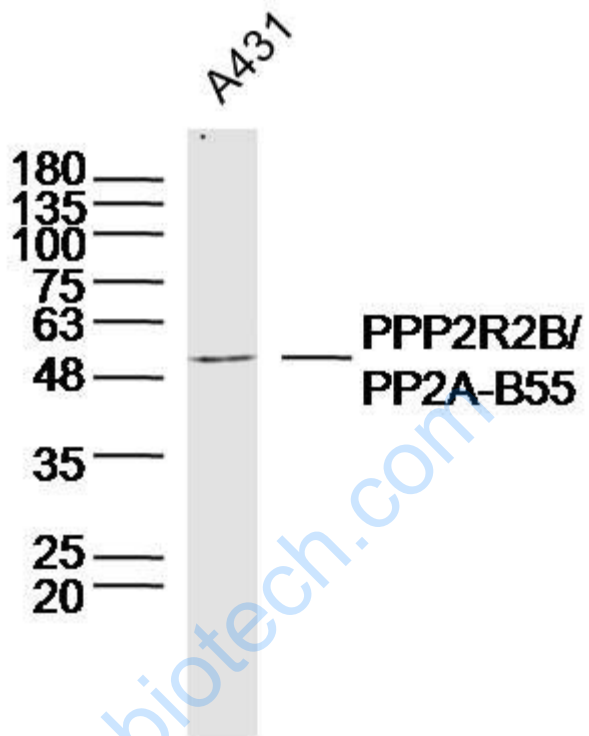
Sample: HepG2 Cell (Human) Lysate at 30 ug

Primary: Anti- PPP2R2B/PP2A-B55 (SL11749R) at 1/300 dilution

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

Predicted band size: 52kD

Observed band size: 52kD



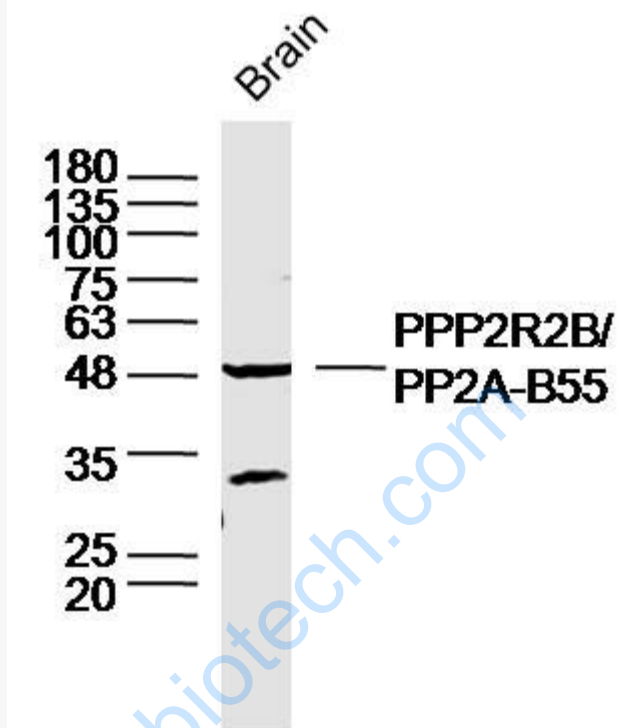
Sample: A431 Cell (Human) Lysate at 40 ug

Primary: Anti- PPP2R2B/PP2A-B55 (SL11749R) at 1/300 dilution

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

Predicted band size: 52kD

Observed band size: 52kD



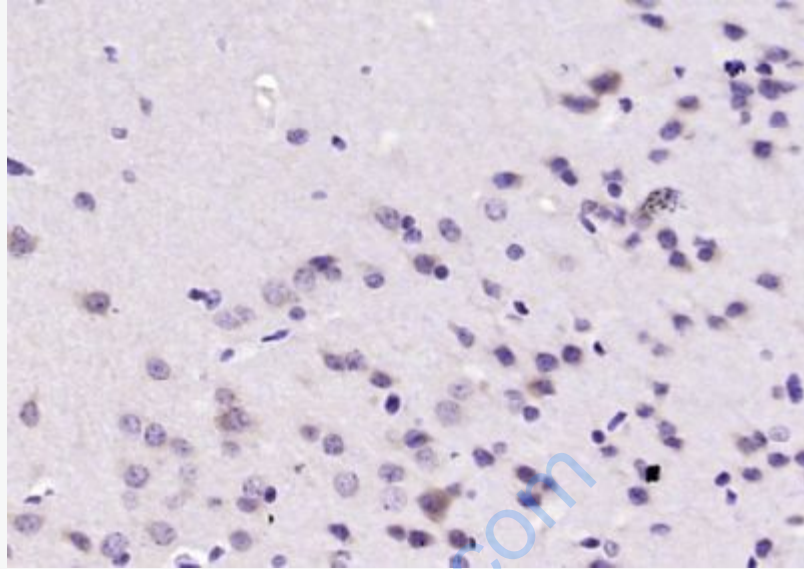
Sample: Brain (Mouse) Lysate at 40 ug

Primary: Anti- PPP2R2B/PP2A-B55 (SL11749R) at 1/300 dilution

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

Predicted band size: 52kD

Observed band size: 52kD



Paraformaldehyde-fixed, paraffin embedded (rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (PPP2R2B,PP2A-B55) Polyclonal Antibody, Unconjugated (SL11749R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.