10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

SPTBN2 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP54313

Product Information

Application	IHC-P, IHC-F, IF, ICC, E
Primary Accession	O15020
Reactivity	Rat, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	271325
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human SPTBN2
Epitope Specificity	71-170/2390
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cytoplasm, cytoskeleton. Cytoplasm, cell cortex.
SIMILARITY	Belongs to the spectrin family. Contains 2 CH (calponin-homology) domains. Contains 1 PH domain. Contains 17 spectrin repeats.
DISEASE	Defects in SPTBN2 are the cause of spinocerebellar ataxia type 5 (SCA5) [MIM:600224]. 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. SCA5 is an autosomal dominant cerebellar ataxia (ADCA). It is a slowly progressive disorder with variable age at onset, ranging between 10 and 50 years.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Spectrin is an actin binding protein that is a major component of the plasma membrane skeleton. Spectrins function as membrane organizers and stabilizers by forming dimers, tetramers and higher polymers. Spectrin Alpha and spectrin Beta are present in erythrocytes, whereas spectrin Alpha II (also designated fodrin Alpha) and spectrin Beta I (also designated fodrin Beta) are present in other somatic cells. The spectrin tetramers in erythrocytes act as barriers to lateral diffusion, but spectrin dimers seem to lack this function. Spectrin Beta III is highly homologous to both spectrin Beta I and spectrin Beta II. Western blot analysis shows that spectrin Beta III migrates at a higher molecular mass than predicted in the kidney. Spectrin Beta III is highly expressed in brain, kidney, pancreas, and liver, and at lower levels in lung and placenta. Specifically, spectrin Beta III constitutes a major component of the Golgi and vesicular membrane skeletons.

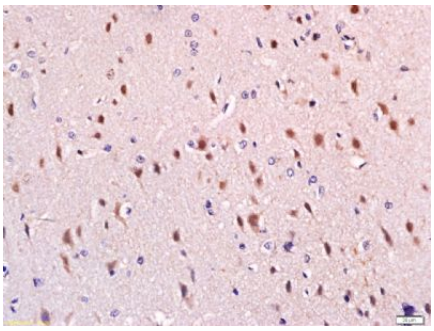
Additional Information

Gene ID	6712
Other Names	Spectrin beta chain, non-erythrocytic 2, Beta-III spectrin, Spinocerebellar ataxia 5 protein, SPTBN2, KIAA0302, SCA5
Target/Specificity	Highly expressed in brain, kidney, pancreas, and liver, and at lower levels in lung and placenta.
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. 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.

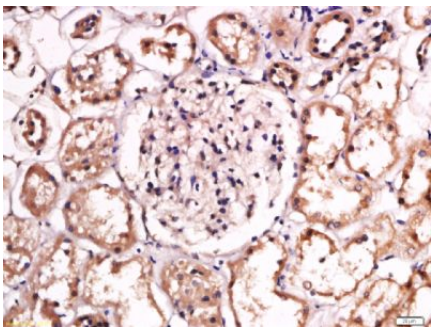
Protein Information

Name	SPTBN2
Synonyms	KIAA0302, SCA5
Function	Probably plays an important role in neuronal membrane skeleton.
Cellular Location	Cytoplasm, cytoskeleton. Cytoplasm, cell cortex.
Tissue Location	Highly expressed in brain, kidney, pancreas, and liver, and at lower levels in lung and placenta

Images



Tissue/cell: rat 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℃ for 20 min;
Incubation: Anti-SPTBN2 Polyclonal Antibody, Unconjugated(AP54313) 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; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min;
Incubation: Anti-SPTBN2 Polyclonal Antibody, Unconjugated(AP54313) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining

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