

SPTBN2 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP54313

Product Information

Application IHC-P, IHC-F, IF, ICC, E

Primary Accession <u>015020</u>

Reactivity Rat, Dog, Bovine

HostRabbitClonalityPolyclonalCalculated MW271325Physical StateLiquid

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

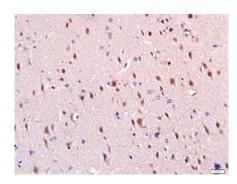
Function Probably plays an important role in neuronal membrane skeleton.

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



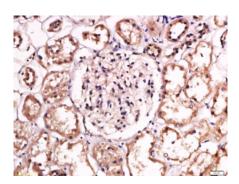
Tissue/cell: rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;

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°C 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°C 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'.