

Anti-Spectrin beta III (SPTBN2) Antibody

Mouse Monoclonal Antibody Catalog # AH13518

Product Information

Application WB, IHC-P, IF, FC

Primary Accession <u>015020</u> **Other Accession** 26915 Reactivity Human, Rat Host Mouse Clonality Monoclonal Isotype Mouse / IgG3 **Clone Names** SPTBN2/1247 Calculated MW 271325

Additional Information

Gene ID 6712

Other Names Beta III spectrin; SCA5; Spectrin beta chain brain 2; Spectrin beta

non-erythrocytic 2; Spectrin non-erythroid beta chain 2; Spinocerebellar

ataxia 5; SPTBN2

Application Note Flow Cytometry (0.5-1ug/million cells); Immunofluorescence (0.5-1ug/ml);

,Western Blotting (0.5-1.0ug/ml);,Immunohistology (Formalin-fixed) (0.5-1.0ug/ml for 30 minutes at RT) ,(Staining of formalin-fixed tissues requires boiling tissue sections in 10mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes),Optimal dilution for a specific

application should be determined.

Format 200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G.

Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available

WITHOUT BSA & azide at 1.0mg/ml.

Storage Store at 2 to 8°C.Antibody is stable for 24 months.

Precautions Anti-Spectrin beta III (SPTBN2) Antibody is for research use only and not for

use in diagnostic or therapeutic procedures.

Protein Information

Name SPTBN2

Synonyms KIAA0302, SCA5

Function Probably plays an important role in neuronal membrane skeleton.

Cellular Location Cytoplasm, cytoskeleton. Cytoplasm, cell cortex.

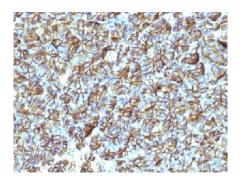
Tissue Location Highly expressed in brain, kidney, pancreas, and liver, and at lower levels in

lung and placenta

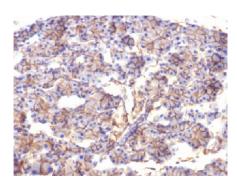
Background

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. Vertebrate spectrins have two alpha-subunits (alpha-II), four beta-subunits (beta-I-beta-IV) and a beta-H subunit creating diversity and specialization of function. Spectrin α and spectrin β are present in erythrocytes, whereas spectrin α II (also designated fodrin α) and spectrin β I (also designated fodrin β) 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 β III is highly homologous to both spectrin β I and spectrin β II. Spectrin β III is highly expressed in brain, kidney, pancreas and liver, and at lower levels in lung and placenta. Spectrin beta 3 is primarily expressed in nervous tissues with highest expression levels in the cerebellum, where it is found in Purkinje cell soma and dendrites.

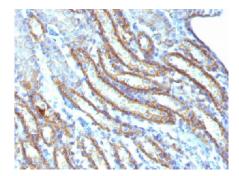
Images



Formalin-fixed, paraffin-embedded Human Pancreas stained with Spectrin beta III Monoclonal Antibody (SPTBN2/1247).



Formalin-fixed, paraffin-embedded Rat Pancreas stained with Spectrin beta III Monoclonal Antibody (SPTBN2/1247).



Formalin-fixed, paraffin-embedded Mouse Kidney stained with Spectrin beta III Monoclonal Antibody (SPTBN2/1247).

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