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Anti-Spectrin beta III (SPTBN2) Antibody

Mouse Monoclonal Antibody
Catalog # AH13522

Product Information

Application	WB, IHC-P, IF, FC
Primary Accession	O15020
Other Accession	26915
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG2b, kappa
Clone Names	SPTBN2/1583
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

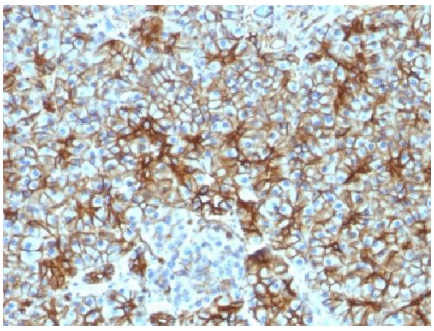
Name	SPTBN2
Synonyms	KIAA0302, SCA5
Function	Probably plays an important role in neuronal membrane skeleton.

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-I/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 (SPTBN2/1583).