

Anti-Spectrin beta III (SPTBN2) Antibody Mouse Monoclonal Antibody Catalog # AH13522

#### Specification

# Anti-Spectrin beta III (SPTBN2) Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW WB, IHC-P, IF, FC <u>015020</u> <u>26915</u> Human Mouse Monoclonal Mouse / IgG2b, kappa 271325

#### Anti-Spectrin beta III (SPTBN2) Antibody - 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 <span class ="dilution\_WB">WB~~1:1000</span><br \><span class ="dilution\_IHC-P">IHC-P~~N/A</span><br \><span class ="dilution\_IF">IF~~1:50~200</span><br \><span class ="dilution\_FC">FC~~1:10~50</span>

**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.

#### Anti-Spectrin beta III (SPTBN2) Antibody - 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**

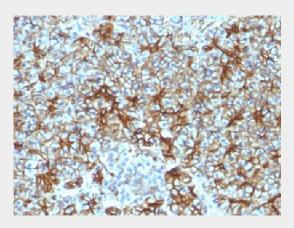
Highly expressed in brain, kidney, pancreas, and liver, and at lower levels in lung and placenta

# Anti-Spectrin beta III (SPTBN2) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

# Anti-Spectrin beta III (SPTBN2) Antibody - Images



Formalin-fixed, paraffin-embedded Human Pancreas stained with Spectrin beta III Monoclonal Antibody (SPTBN2/1583).

#### Anti-Spectrin beta III (SPTBN2) Antibody - 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  $\alpha$  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. Spectrin  $\beta$  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.