

**Anti-Spectrin beta III (SPTBN2) Antibody**  
**Mouse Monoclonal Antibody**  
**Catalog # AH13524****Specification**

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

Application	WB, IHC-P, IF, FC
Primary Accession	<a href="#">O15020</a>
Other Accession	<a href="#">26915</a>
Reactivity	Human, Rat
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG1
Calculated MW	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**

WB~~1:1000  
IHC-P~~N/A  
IF~~1:50~200  
FC~~1:10~50

**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.

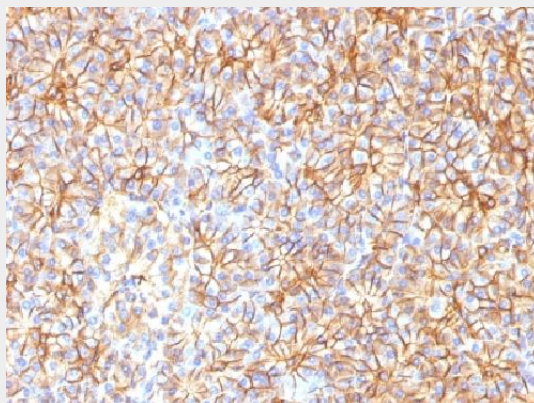
**Tissue Location**

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

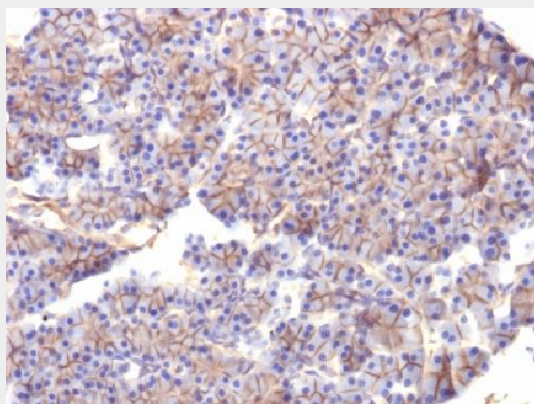
**Anti-Spectrin beta III (SPTBN2) Antibody - Protocols**

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

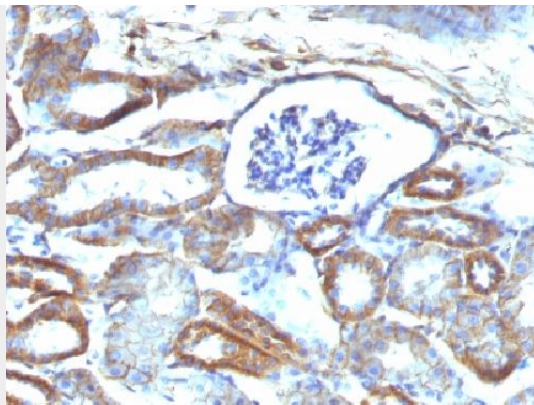
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

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

Formalin-fixed, paraffin-embedded Human Pancreas stained with Spectrin beta III Monoclonal Antibody (SPTBN2/1584).



Formalin-fixed, paraffin-embedded Rat Pancreas stained with Spectrin beta III Monoclonal Antibody (SPTBN2/1584).



Formalin-fixed, paraffin-embedded Mouse Kidney stained with Spectrin beta III Monoclonal Antibody (SPTBN2/1584).

#### **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.