

# Anti-Spectrin beta III (SPTBN2) Antibody

Mouse Monoclonal Antibody

Catalog # AH13520

## Product Information

---

<b>Application</b>	WB, IHC-P, IF, FC, E
<b>Primary Accession</b>	<a href="#">O15020</a>
<b>Other Accession</b>	<a href="#">26915</a>
<b>Reactivity</b>	Human
<b>Host</b>	Mouse
<b>Clonality</b>	Monoclonal
<b>Isotype</b>	Mouse / IgG2a, kappa
<b>Clone Names</b>	SPTBN2/1582
<b>Calculated MW</b>	271325

## Additional Information

---

<b>Gene ID</b>	6712
<b>Other Names</b>	Beta III spectrin; SCA5; Spectrin beta chain brain 2; Spectrin beta non-erythrocytic 2; Spectrin non-erythroid beta chain 2; Spinocerebellar ataxia 5; SPTBN2
<b>Application Note</b>	ELISA (Use Ab at 2-4ug/ml for coating) (Order Ab without BSA);,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.
<b>Format</b>	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.
<b>Storage</b>	Store at 2 to 8°C.Antibody is stable for 24 months.
<b>Precautions</b>	Anti-Spectrin beta III (SPTBN2) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

---

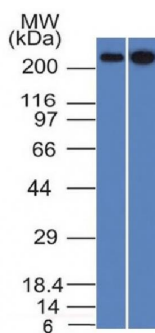
<b>Name</b>	SPTBN2
<b>Synonyms</b>	KIAA0302, SCA5

<b>Function</b>	Probably plays an important role in neuronal membrane skeleton.
<b>Cellular Location</b>	Cytoplasm, cytoskeleton. Cytoplasm, cell cortex.
<b>Tissue Location</b>	Highly expressed in brain, kidney, pancreas, and liver, and at lower levels in lung and placenta

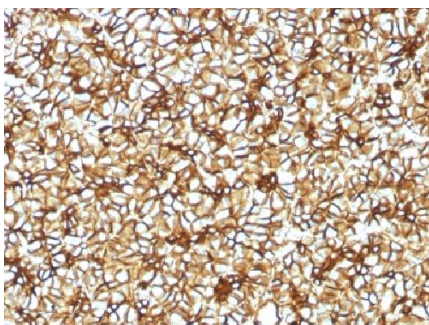
## Background

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  $\alpha$  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.

## Images



Western Blot Analysis of HeLa and 293 Cell Lysates using Spectrin beta III Monoclonal Antibody (SPTBN2/1582).



Formalin-fixed, paraffin-embedded Human Pancreas stained with Spectrin beta III Monoclonal Antibody (SPTBN2/1582).

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