

# Anti-Spectrin beta III (SPTBN2) Antibody

Mouse Monoclonal Antibody

Catalog # AH13522

## Product Information

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| <b>Application</b>       | WB, IHC-P, IF, FC      |
| <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 / IgG2b, kappa   |
| <b>Clone Names</b>       | SPTBN2/1583            |
| <b>Calculated MW</b>     | 271325                 |

## Additional Information

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| <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> | 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

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|-----------------|---|
| <b>Name</b>     | SPTBN2  |
| <b>Synonyms</b> | KIAA0302, SCA5  |
| <b>Function</b> | Probably plays an important role in neuronal membrane skeleton. |

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|--------------------------|--|
| <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 |

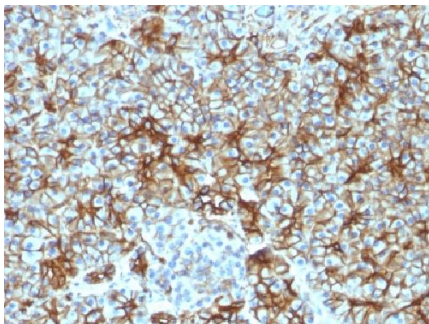
## Background

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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

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

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