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36-3201: Anti-Spectrin beta III (SPTBN2) Monoclonal Antibody(Clone: SPTBN2/1583)

Clonality :	Monoclonal
Clone Name :	SPTBN2/1583
Application :	FACS,WB,IHC
Reactivity :	Human
Gene :	SPTBN2
Gene ID :	6712
Uniprot ID :	O15020
Alternative Name :	Beta III spectrin; SCA5; Spectrin beta chain brain 2; Spectrin beta non-erythrocytic 2; Spectrin non-erythroid beta chain 2; Spinocerebellar ataxia 5; SPTBN2
Isotype :	Mouse IgG2b, kappa
Immunogen Information :	Recombinant fragment (around aa356-475) of human SPTBN2 protein (exact sequence is proprietary)

Description

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 and spectrin are present in erythrocytes, whereas spectrin II (also designated fodrin) and spectrin I (also designated fodrin) 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 III is highly homologous to both spectrin I and spectrin II. Spectrin 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.

Product Info

Amount :	20 µg / 100 µg
Content :	200 µg/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 condition :	Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous.

Application Note

Flow Cytometry (1-2ug/million cells); (,Immunofluorescence (1-2ug/ml); ,Western Blot (1-2ug/ml);,Immunohistochemistry (Formalin-fixed) (1-2ug/ml for 30 minutes at RT) ,(Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95&degC followed by cooling at RT for 20 minutes);

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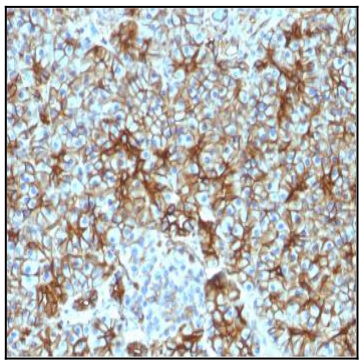

Fig. 1: Formalin-fixed, paraffin-embedded human Pancreas stained with Spectrin beta III Monoclonal Antibody (SPTBN2/1583).

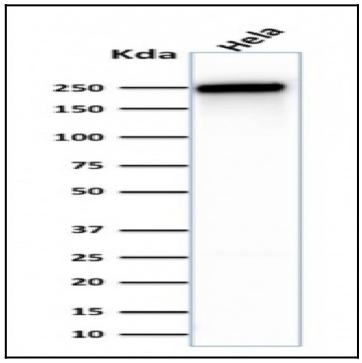

Fig. 2: Western Blot Analysis of human HeLa cell lysate using Spectrin beta III Monoclonal Antibody (SPTBN2/1583).

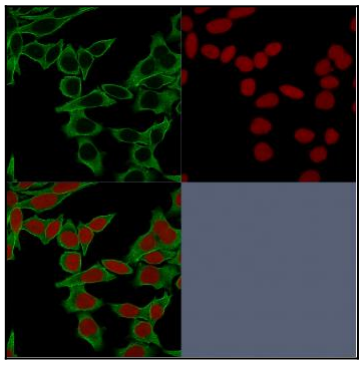

Fig. 3: Confocal Immunofluorescence of HeLa cells. Spectrin beta III Monoclonal Antibody (SPTBN2/1583) labeled with CF488 (Green). Reddot is used to label the nuclei.

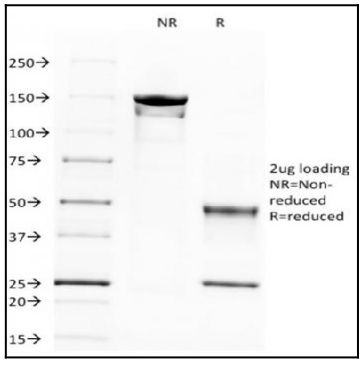

Fig. 4: SDS-PAGE Analysis Purified Spectrin beta III Monoclonal Antibody (SPTBN2/1583) labeled with CF488 (Green). Confirmation of Integrity and Purity of Antibody.

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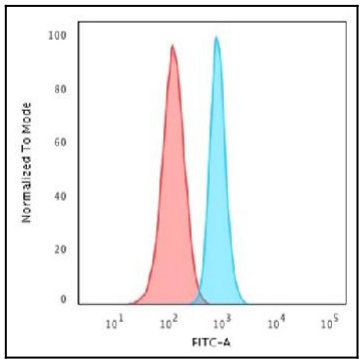

Fig. 5: Flow Cytometric Analysis of HeLa cells. Spectrin beta III Monoclonal Antibody (SPTBN2/1583) labeled with CF488 followed by Goat anti-Mouse IgG-CF488 (Blue); Isotype Control (Red).

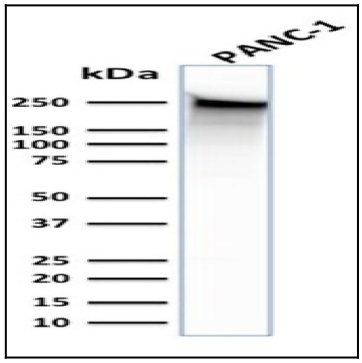

Fig. 6: Western Blot Analysis of human PANC-1 cell lysate using Spectrin beta III Monoclonal Antibody (SPTBN2/1583).

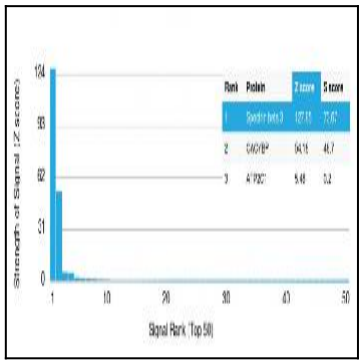

Fig. 7: Analysis of Protein Array containing more than 19,000 full-length human proteins using Spectrin beta III Mouse Monoclonal Antibody (SPTBN2/1583). Z- and S-Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProtTM array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProtTM are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target. A MAb is considered to specific to its intended target, if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.