

36-3196: Anti-Fodrin / Alpha Spectrin II (SPTAN1) / NEAS Monoclonal Antibody(Clone: SPTAN1/3351)

Clonality :	Monoclonal
Clone Name :	SPTAN1/3351
Application :	IHC
Reactivity :	Human
Gene :	SPTAN1
Gene ID :	6709
Uniprot ID :	Q13813
Alternative Name :	Alpha-II spectrin; brain; EIEE5; Fodrin alpha chain; NEAS; Non erythrocytic spectrin alpha; non-erythroid alpha chain; SPECA; Spectrin alpha chain brain; Spectrin, alpha, non-erythrocytic 1 (alpha-fodrin); Spna2; SPTA2
Isotype :	Mouse IgG2b, kappa
Immunogen Information :	Recombinant fragment of human SPTAN1 protein (around aa 2351-2475) (exact sequence is proprietary)

Description

Spectrin, an actin binding protein that is a major component of the cytoskeletal superstructure of the erythrocyte plasma membrane, is essential in determining the properties of the membrane including its shape and deformability. Spectrins function as membrane organizers and stabilizers, composed of nonhomologous and chains, which aggregate side-to-side in an antiparallel fashion to form dimers, tetramers, and higher polymers. Spectrin I and spectrin I are present in erythrocytes, whereas spectrin II (also designated fodrin) and spectrin II (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. Activation of calpain results in the breakdown of spectrin II, a neuronal cytoskeleton protein.

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

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°C followed by cooling at RT for 20 minutes);

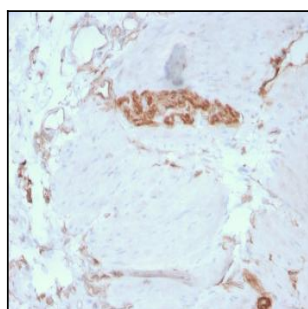


Fig. 1: Formalin-fixed, paraffin-embedded human Colon stained with Fodrin Mouse Monoclonal Antibody (SPTAN1/3351).

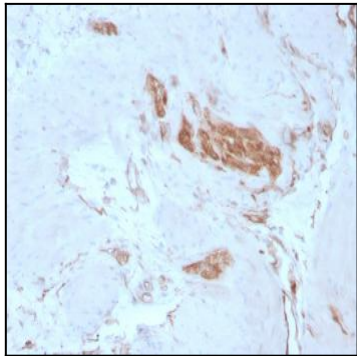


Fig. 2: Formalin-fixed, paraffin-embedded human Tonsil stained with Fodrin Mouse Monoclonal Antibody (SPTAN1/3351).

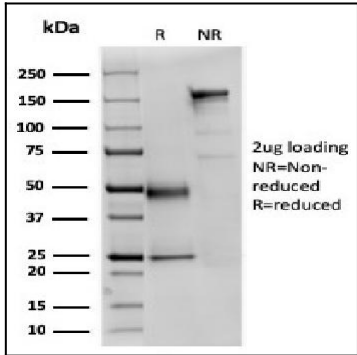


Fig. 3: SDS-PAGE Analysis Purified Fodrin Mouse Monoclonal Antibody (SPTAN1/3351). Confirmation of Purity and Integrity of Antibody.

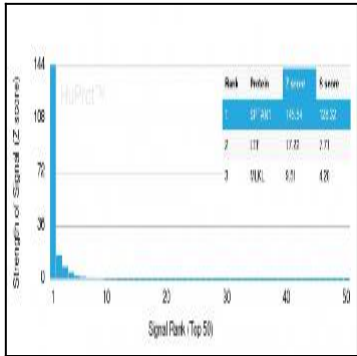


Fig. 4: Analysis of Protein Array containing more than 19,000 full-length human proteins using Fodrin Mouse Monoclonal Antibody (SPTAN1/3351). Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt™ 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 HuProt™ 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.