

## Fodrin / Alpha Spectrin II (SPTAN1) / NEAS Antibody

Mouse Monoclonal Antibody [Clone SPTAN1/3507]

Catalog No	Format	Size
6709-MSM7-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
6709-MSM7-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
6709-MSM7-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

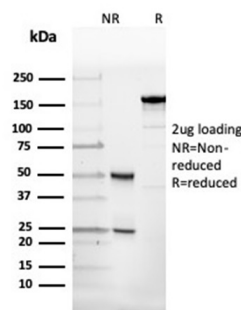
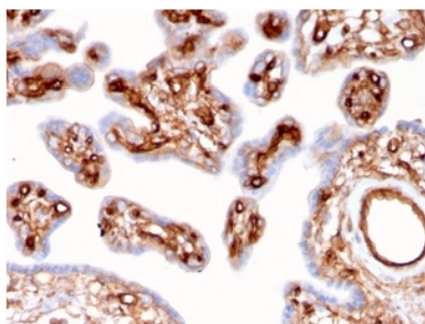
Applications	Tested Dillution	Note
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes

### Product Details

<b>Clone</b>	SPTAN1/3507
<b>Gene Name</b>	SPTAN1
<b>Immunogen</b>	Recombinant fragment of human SPTAN1 protein (around aa2351-2475) (exact sequence is proprietary))
<b>Host</b>	Mouse
<b>Clonality</b>	Monoclonal
<b>Isotype / Light Chain</b>	IgG
<b>Mol. Weight of Antigen</b>	240kDa
<b>Cellular Localization</b>	Cell cortex, Cytoplasm, Cytoskeleton
<b>Species Reactivity</b>	Human
<b>Positive Control</b>	Human colon or kidney tissues (IHC).

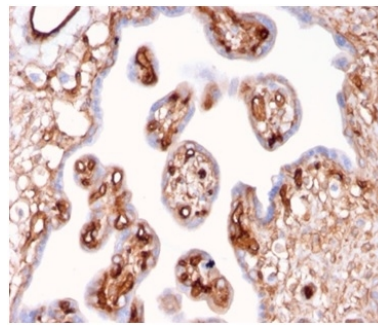
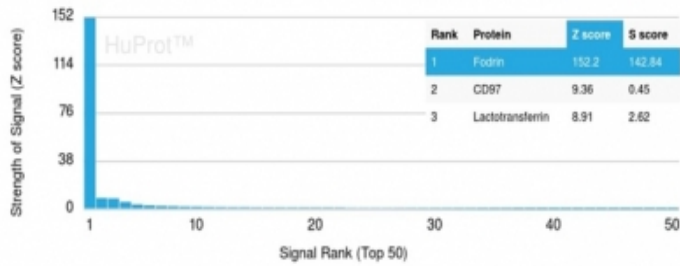
\*Optimal dilution for a specific application should be determined.

### Product Images for Fodrin / Alpha Spectrin II (SPTAN1) / NEAS Antibody



Formalin-fixed, paraffin-embedded human placenta stained with Fodrin, alpha Mouse Monoclonal Antibody (SPTAN1/3507). HIER: Tris/EDTA, pH9.0, 45min. 2°C: HRP-polymer, 30min. DAB, 5min.

SDS-PAGE Analysis of Purified Fodrin, alpha Mouse Monoclonal Antibody (SPTAN1/3507). Confirmation of Purity and Integrity of Antibody.



Formalin-fixed, paraffin-embedded human placenta stained with Fodrin, alpha Mouse Monoclonal Antibody (SPTAN1/3507). HIER: Tris/EDTA, pH9.0, 45min. 2°C: HRP-polymer, 30min. DAB, 5min.

Analysis of Protein Array containing more than 19,000 full-length human proteins using Monospecific Mouse Monoclonal Antibody (SPTAN1/3507) to Fodrin, alpha. 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 be 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.

### Specificity & Comments

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  $\alpha$  and  $\beta$  chains, which aggregate side-to-side in an antiparallel fashion to form dimers, tetramers, and higher polymers. Spectrin  $\alpha$  I and spectrin  $\beta$  I are present in erythrocytes, whereas spectrin  $\alpha$  II (also designated fodrin  $\alpha$ ) and spectrin  $\beta$  II (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. Activation of calpain results in the breakdown of spectrin  $\beta$  II, a neuronal cytoskeleton protein.

### Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis. There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

### Supplied As

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 and Stability

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. No MSDS required.

### Research Areas

Apoptosis, Autophagy, Cardiovascular, Developmental Biology, Immunology, Signal Transduction