

**beta 4 Spectrin Antibody**  
**beta 4 Spectrin Antibody, Clone S393-2**  
**Catalog # ASM10316**

**Specification**

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**beta 4 Spectrin Antibody - Product Information**

Application	<b>WB</b>
Primary Accession	<a href="#">O9H254</a>
Other Accession	<a href="#">NP_066022.2</a>
Host	<b>Mouse</b>
Isotype	<b>IgG1</b>
Reactivity	<b>Human, Mouse, Rat</b>
Clonality	<b>Monoclonal</b>

**Description**

Mouse Anti-Human beta 4 Spectrin Monoclonal IgG1

**Target/Specificity**

Detects ~>200kDa. Does not cross react with other Beta-spectrins

**Other Names**

BetaIV-spectrin sigma1 Antibody, Non-erythrocytic spectrin beta chain 4 Antibody, Non-erythroidspectrin beta chain 3 Antibody, SPTBN4 Antibody, SPTBN3 Antibody, Spnb4 Antibody, KIAA1642 Antibody, EMBL BAB83243.1 Antibody, Ensembl ENSRNOP00000028393 Antibody

**Immunogen**

Fusion protein amino acids 1621-1832 (C-terminal repeats 14 to 15) of human Beta4-spectrin

**Purification**

Protein G Purified

Storage **-20°C**

**Storage Buffer**

PBS pH7.4, 50% glycerol, 0.1% sodium azide

Shipping Temperature

**Blue Ice or 4°C**

**Certificate of Analysis**

A 1:100 dilution of SMC-484 was sufficient for detection of Beta 4 Spectrin in 20 µg of mouse brain lysate by ECL immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody.

**Cellular Localization**

Cytoplasm | Cytoskeleton | Cytoplasm | Cell Cortex

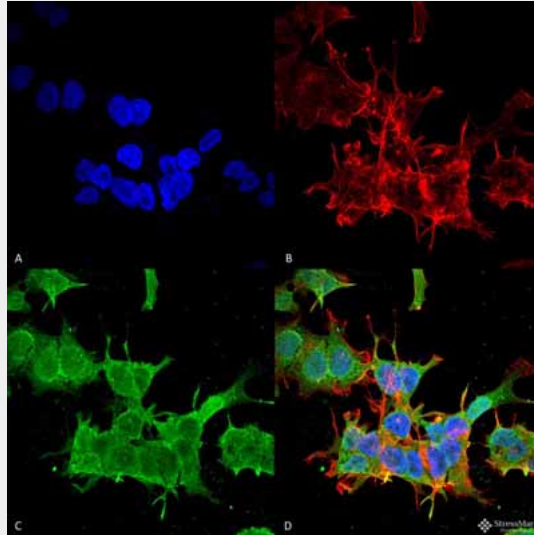
**beta 4 Spectrin Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

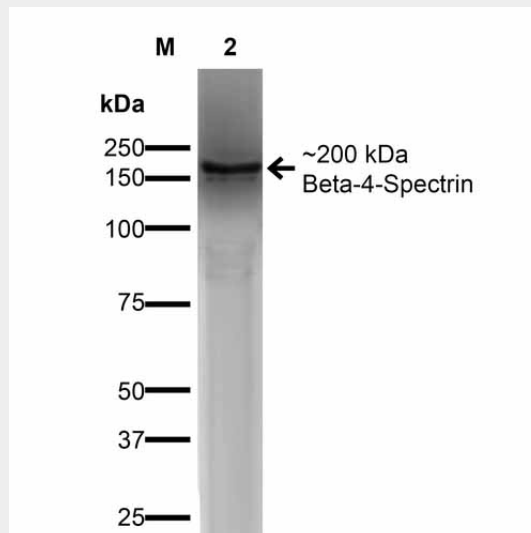
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)

- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**beta 4 Spectrin Antibody - Images**



Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-beta 4 Spectrin Monoclonal Antibody, Clone S393-2 (ASM10316). Tissue: Neuroblastoma cell line (SK-N-BE). Species: Human. Fixation: 4% Formaldehyde for 15 min at RT. Primary Antibody: Mouse Anti-beta 4 Spectrin Monoclonal Antibody (ASM10316) at 1:100 for 60 min at RT. Secondary Antibody: Goat Anti-Mouse ATTO 488 at 1:100 for 60 min at RT. Counterstain: Phalloidin Texas Red F-Actin stain; DAPI (blue) nuclear stain at 1:1000; 1:5000 for 60 min RT, 5 min RT. Localization: Cytoplasm. Magnification: 60X. (A) DAPI (blue) nuclear stain (B) Phalloidin Texas Red F-Actin stain (C) beta 4 Spectrin Antibody (D) Composite.



Western Blot analysis of COS-Beta-4-Spectrin-His showing detection of ~ 200 kDa Beta-4-Spectrin protein using Mouse Anti-Beta-4-Spectrin Monoclonal Antibody, Clone S393-2 (ASM10316). Lane 1: MW Ladder. Lane 2: COS-Beta-4-Spectrin-His. Load: 15 µg. Block: 2% GE Healthcare Blocker for 1 hour at RT. Primary Antibody: Mouse Anti-Beta-4-Spectrin Monoclonal Antibody (ASM10316) at

1:1000 for 16 hours at 4°C. Secondary Antibody: Goat Anti-Mouse IgG: HRP at 1:200 for 1 hour at RT. Color Development: ECL solution for 6 min at RT. Predicted/Observed Size: ~ 200 kDa.

#### **beta 4 Spectrin Antibody - Background**

Spectrin is the major constituent of the cytoskeletal network underlying the erythrocyte plasma membrane and determines cell shape, arrangement of transmembrane proteins and organization of organelles. It is expressed at very low levels in many tissues, with the strongest expression in the cerebellum, spinal cord, stomach, pituitary gland, liver, pancreas, salivary gland, kidney, bladder and heart (1). Spectrin beta 4 is a non-erythrocyte member, and is expressed in the brain and pancreatic islets and localized to the nuclear matrix, cytoplasmic vesicles and PML nuclear bodies. Beta4 spectrins are also essential for membrane stability and the molecular organization of the nodes of Ranvier (2).

#### **beta 4 Spectrin Antibody - References**

1. Genes and mapped phenotypes. (n.d.). Retrieved March 12, 2015, from <http://www.ncbi.nlm.nih.gov/gene/57731>
2. Yang Y., Lacas-Gervais S., Morest D.K., Solimena M., and Rasband M.N. (2004) J Neurosci. 24(33): 7230-7240.