

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

Specification

beta 4 Spectrin Antibody - Product Information

Application	WB
Primary Accession	O9H254
Other Accession	NP_066022.2
Host	Mouse
Isotype	IgG1
Reactivity	Human, Mouse, Rat
Clonality	Monoclonal

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

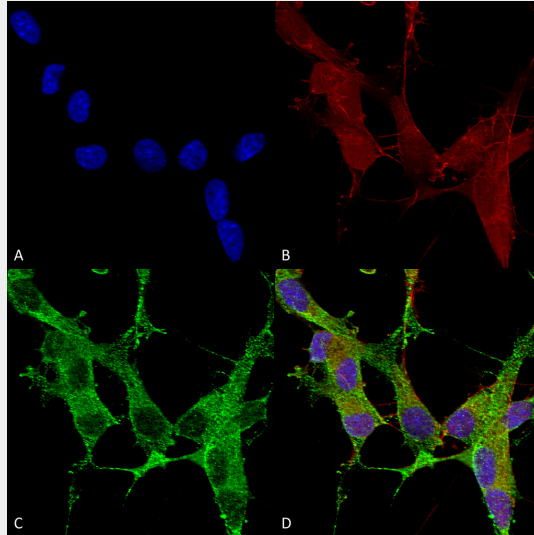
beta 4 Spectrin Antibody - Protocols

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

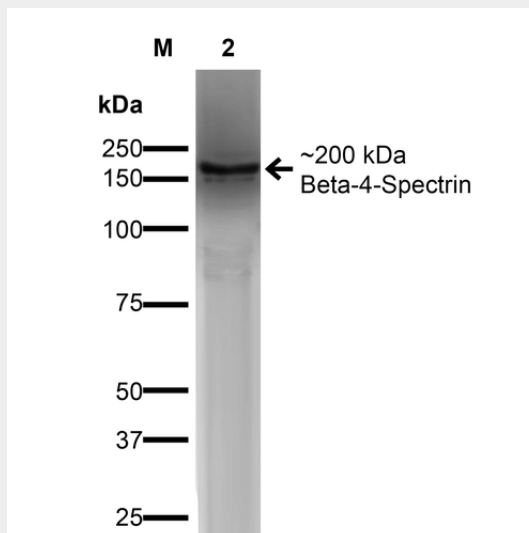
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)

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

beta 4 Spectrin Antibody - Images



Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-beta 4 Spectrin Monoclonal Antibody, Clone N393/2 (ASM10316). Tissue: Neuroblastoma cells (SH-SY5Y). Species: Human. Fixation: 4% PFA for 15 min. Primary Antibody: Mouse Anti-beta 4 Spectrin Monoclonal Antibody (ASM10316) at 1:100 for overnight at 4°C with slow rocking. Secondary Antibody: AlexaFluor 488 at 1:1000 for 1 hour at RT. Counterstain: Phalloidin-iFluor 647 (red) F-Actin stain; Hoechst (blue) nuclear stain at 1:800, 1.6mM for 20 min at RT. (A) Hoechst (blue) nuclear stain. (B) Phalloidin-iFluor 647 (red) F-Actin stain. (C) beta 4 Spectrin Antibody (D) Composite.



Western Blot analysis of Monkey COS-Beta-4-Spectrin-His showing detection of ~ 200 kDa Beta-4-Spectrin protein using Mouse Anti-Beta-4-Spectrin Monoclonal Antibody, Clone N393/2 (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.