

Mouse beta 4 Spectrin Monoclonal Antibody | anti-SPTBN4 antibody

Mouse Anti-Human beta 4 Spectrin Monoclonal IgG1

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA103786	Mouse	Human, Mouse, Rat	Immunofluorescence, Immunocytochemistry, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

beta 4 Spectrin; Monoclonal Antibody; Mouse Anti-Human beta 4 Spectrin Monoclonal IgG1; 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; beta 4 Spectrin Antibody: FITC; Mouse Anti-Human beta 4 Spectrin Monoclonal; Clone S393-2; Anti-beta 4 spectrin; beta 4 Spectrin Antibody; anti-SPTBN4 antibody

PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Human, Mouse, Rat
Clonality	Monoclonal
Isotype	IgG1
Clone Number	S393-2
Purity/Purification	Protein G Purified
Concentration	1 mg/ml (varies by lot)
Sequence Length	2564
Applicable Applications for anti-SPTBN4 antibody	IF (Immunofluorescence), ICC (Immunocytochemistry), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	Fusion protein amino acids 1621-1832 (C-terminal repeats 14 to 15) of human Beta4-spectrin
Immunogen Species	Human
COA	A 1:100 dilution was sufficient for detection of Beta 4 Spectrin in 20 ug of mouse brain lysate by ECL immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody.
Storage Buffer	PBS pH7.4, 50% glycerol, 0.1% sodium azide
Conjugate	FITC
Cellular Localization	Cytoplasm, Cytoskeleton, Cytoplasm, Cell Cortex
Research Areas	Cell Signaling, Neuroscience, Scaffold Proteins
Preparation and Storage	Store at -20°C

IMAGES



WB (Western Blot)
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. Lane 1: MW Ladder. Lane 2: COS-Beta-4-Spectrin-His. Load: 15 ug. Block: 2% GE Healthcare Blocker for 1 hour at RT. Primary Antibody: Mouse Anti-Beta-4-Spectrin Monoclonal Antibody at 1:1000 for 16 hours at 4 degree 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.

ADDITIONAL INFORMATION

Related Product Information for anti-SPTBN4 antibody	Spectrin is the major constituent of the cytoskeletal network underlying the erthrocyte 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 localisted 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).
Product Categories/Family for anti-SPTBN4 antibody	Neuroscience; Cell Signaling; Scaffolds
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.

NCBI AND UNIPROT INFORMATION

NCBI GI #	115430237
NCBI GeneID	57731
NCBI Accession #	NP_066022.2
NCBI GenBank Nucleotide #	NM_020971.2
UniProt Accession #	Q9H254; Q9H1K7; Q9H1K8; Q9H1K9; Q9H253; Q9H3G8; Q9HCD0; E9PGQ5
Molecular Weight	Detects ~>200kDa.
NCBI Official Full Name	spectrin beta chain, non-erythrocytic 4 isoform sigma1
NCBI Official Synonym Full Names	spectrin beta, non-erythrocytic 4
NCBI Official Symbol	SPTBN4
NCBI Official Synonym Symbols	QV; SPNB4; SPTBN3
NCBI Protein Information	spectrin beta chain, non-erythrocytic 4
UniProt Protein Name	Spectrin beta chain, non-erythrocytic 4
UniProt Gene Name	SPTBN4
UniProt Synonym Gene Names	KIAA1642; SPTBN3
UniProt Entry Name	SPTN4_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

