

Datasheet for ABIN2485663
anti-SPTBN4 antibody (AA 1621-1832)[Go to Product page](#)

3 Images

Overview

Quantity:	100 µg
Target:	SPTBN4
Binding Specificity:	AA 1621-1832
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Immunocytochemistry (ICC), Immunofluorescence (IF)

Product Details

Immunogen:	Fusion protein amino acids 1621-1832 (C-terminal repeats 14 to 15) of human Beta4-spectrin
Clone:	S393-2
Isotype:	IgG1
Specificity:	Detects ~>200 kDa. Does not cross react with other Beta-spectrins
Cross-Reactivity:	Human, Mouse, Rat
Purification:	Protein G Purified

Target Details

Target:	SPTBN4
Alternative Name:	beta 4 Spectrin (SPTBN4 Products)

Target Details

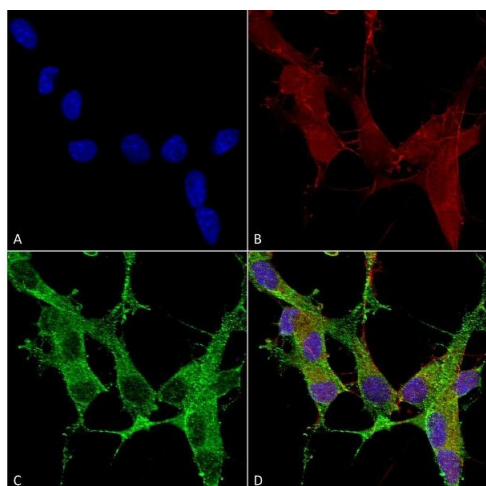
Background:	Spectrin is the major constituent of the cytoskeletal network underlying the erythrocyte plasma membrane and determines cell shape, arrangement of transmembrane proteins and organization of organelles. It is expressed at very low levels in many tissues, with the strongest expression in the 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).
Gene ID:	57731
NCBI Accession:	NP_066022
UniProt:	Q9H254
Pathways:	Sensory Perception of Sound , Regulation of Actin Filament Polymerization , Maintenance of Protein Location

Application Details

Application Notes:	<ul style="list-style-type: none">• WB (1:1000)• optimal dilutions for assays should be determined by the user.
Comment:	A 1:100 dilution of ABIN2485663 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.
Restrictions:	For Research Use only

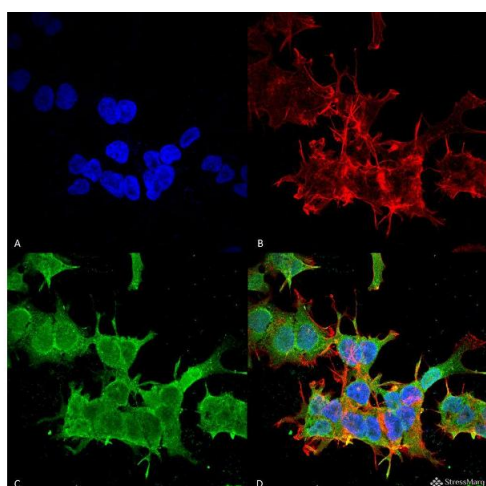
Handling

Format:	Liquid
Concentration:	1 mg/mL
Buffer:	PBS pH 7.4, 50 % glycerol, 0.1 % sodium azide, Storage buffer may change when conjugated
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	-20°C



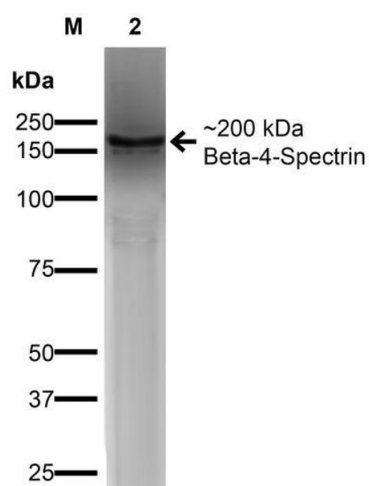
Immunocytochemistry

Image 1. Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-beta 4 Spectrin Monoclonal Antibody, Clone S393-2 (ABIN2485663). Tissue: Neuroblastoma cells (SH-SY5Y). Species: Human. Fixation: 4 % PFA for 15 min. Primary Antibody: Mouse Anti-beta 4 Spectrin Monoclonal Antibody (ABIN2485663) 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, 1.6 mM 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.



Immunofluorescence (fixed cells)

Image 2. Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-beta 4 Spectrin Monoclonal Antibody, Clone S393-2. 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 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 Blotting

Image 3. 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 µg. 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°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.