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## anti-SPTBN4 antibody (AA 1621-1832) (Atto 390)





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Quantity:	100 μg	
Target:	SPTBN4	
Binding Specificity:	AA 1621-1832	
Reactivity:	Human	
Host:	Mouse	
Clonality:	Monoclonal	
Conjugate:	This SPTBN4 antibody is conjugated to Atto 390	
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:	lgG1	
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

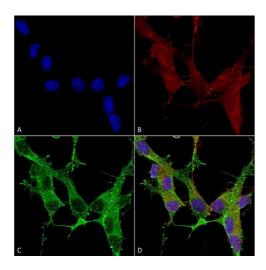
## **Target Details**

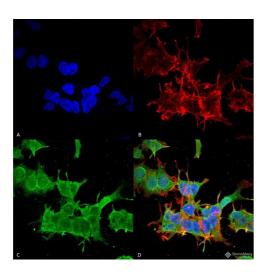
Alternative Name:	beta 4 Spectrin (SPTBN4 Products)	
Background:	Spectrin is the major constituent of the cytoskeletal network underlying the erthrocyte plasma	
	membrane and determines cell shape, arrangement of transmembrane proteins and	
	organization of organelles. It is expressed at very low levels 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).	
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:	• WB (1:1000)	
	optimal dilutions for assays should be determined by the user.	
Comment:	A 1:100 dilution of ABIN2485664 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:	4 °C	

Storage Comment:

Conjugated antibodies should be stored at 4°C

### **Images**



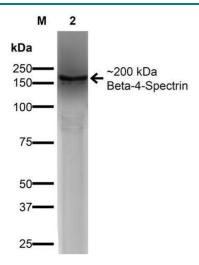


#### **Immunocytochemistry**

Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-beta 4 Spectrin Monoclonal Antibody, Clone S393-2 (ABIN2485664). Tissue: Neuroblastoma cells (SH-SY5Y). Species: Human. Fixation: 4% PFA for 15 min. Primary Antibody: Mouse Anti-beta 4 Spectrin Monoclonal Antibody (ABIN2485664) 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.