Datasheet for ABIN2485402

anti-SHANK3 antibody (AA 840-857) (Atto 390)

5 Images

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Overview

Quantity:	100 µg
Target:	SHANK3
Binding Specificity:	AA 840-857
Reactivity:	Rat
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This SHANK3 antibody is conjugated to Atto 390
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Immunoprecipitation (IP), Immunofluorescence (IF), Immunocytochemistry (ICC), Antibody Array (AA)

Product Details

Immunogen:	Synthetic peptide amino acids 840-857 of rat Shank3
Clone:	S69
Isotype:	IgG2b
Specificity:	Detects ~190 kDa. No cross-reactivity against Shank1 or Shank2.
Cross-Reactivity:	Human, Mouse, Rat
Purification:	Protein G Purified

Target Details

Target:	SHANK3

Target Details

Alternative Name:	SHANK3 (SHANK3 Products)
Background:	Shank proteins make up a family of scaffold proteins identified through their interaction with a variety of membrane and cytoplasmic proteins (1). Shank proteins at postsynaptic sites of excitatory synapses play roles in signal transmission into the postsynaptic neuron. Shank proteins are also crucial in receptor tyrosine kinase signaling, specifically, Shank3 can mediate Erk-MAPK and P13K signaling which is crucial for tubule formation (2). Shank3 is also one of the latest genes to be associated with autism. A mutation of a single copy of Shank3 on chromosome 22q13 can result in language and/or social communication disorders (3).
Gene ID:	59312
NCBI Accession:	NP_067708
UniProt:	Q9JLU4
Pathways:	Synaptic Membrane, Tube Formation, Regulation of long-term Neuronal Synaptic Plasticity

Application Details

Application Notes:	• WB (1:1000) • IHC (1:100) • ICC/IF (1:100) • optimal dilutions for assays should be determined by the user.
Comment:	1 µg/ml of ABIN2485402 was sufficient for detection of Shank3 in 10 µg COS cell lysate transiently transfected with Shank3 by colorimetric immunoblot analysis using goat anti-mouse IgG:HRP as the secondary antibody.
Restrictions:	For Research Use only

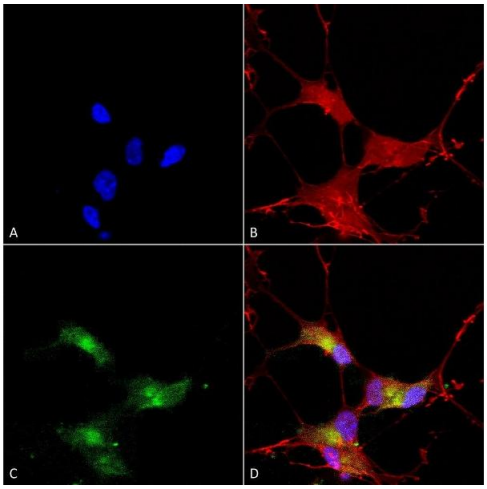
Handling

Format:	Liquid
Concentration:	1 mg/mL
Buffer:	PBS pH 7.4, 50 % glycerol, 0.09 % 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

Handling

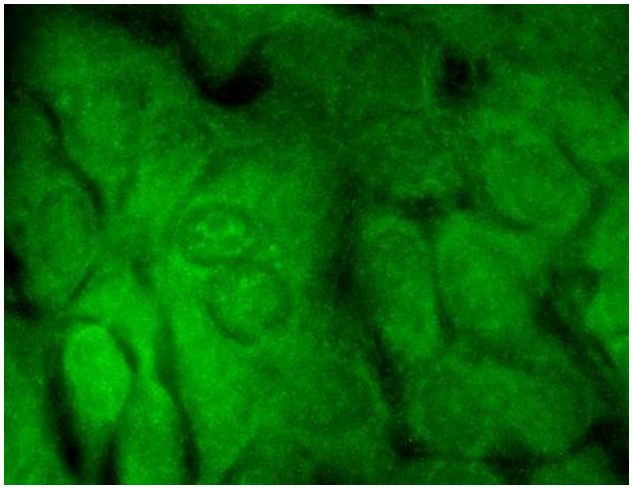
Storage Comment:	Conjugated antibodies should be stored at 4°C

Images



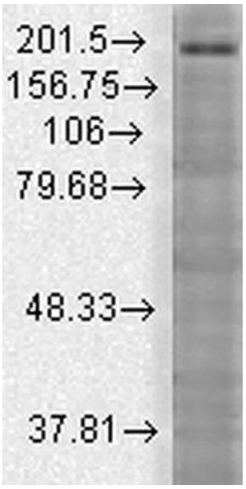
Immunocytochemistry

Image 1. Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-SHANK3 Monoclonal Antibody, Clone S69-46 (ABIN2485402). Tissue: Neuroblastoma cells (SH-SY5Y). Species: Human. Fixation: 4 % PFA for 15 min. Primary Antibody: Mouse Anti-SHANK3 Monoclonal Antibody (ABIN2485402) at 1:50 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) SHANK3 Antibody (D) Composite.



Immunofluorescence (fixed cells)

Image 2. Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-SHANK3 Monoclonal Antibody, Clone S69-46 . Tissue: HaCaT cells. Species: Human. Fixation: Cold 100% methanol for 10 minutes at -20°C. Primary Antibody: Mouse Anti-SHANK3 Monoclonal Antibody at 1:100 for 1 hour at RT. Secondary Antibody: FITC Goat Anti-Mouse (green) at 1:50 for 1 hour at RT. Localization: Borderline positive.



Western Blotting

Image 3. Western Blot analysis of Rat brain membrane lysate showing detection of SHANK3 protein using Mouse Anti-SHANK3 Monoclonal Antibody, Clone S69-46 . Load: 15 µg. Block: 1.5% BSA for 30 minutes at RT. Primary Antibody: Mouse Anti-SHANK3 Monoclonal Antibody at 1:1000 for 2 hours at RT. Secondary Antibody: Sheep Anti-Mouse IgG: HRP for 1 hour at RT.

Please check the product details page for more images. Overall 5 images are available for ABIN2485402.