

Datasheet for ABIN863120  
**anti-SHANK2 antibody (AA 84-309)**

4 Images

1 Publication

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## Overview

Quantity:	100 µg
Target:	SHANK2
Binding Specificity:	AA 84-309
Reactivity:	Rat
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This SHANK2 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Immunoprecipitation (IP), Immunocytochemistry (ICC), Immunofluorescence (IF), Antibody Array (AA)

## Product Details

Immunogen:	Fusion protein amino acids 84-309 of rat Shank2
Clone:	N23b-49 (Formerly S23b-49)
Isotype:	IgG1
Specificity:	Detects ~160 kDa. Recognizes Shank1, 2 and 3.
Cross-Reactivity:	Human, Mouse, Rat
Purification:	Protein G Purified

## Target Details

Target:	SHANK2
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## Target Details

Alternative Name:	SHANK ( <a href="#">SHANK2 Products</a> )
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. Studies suggest that Shank2 is expressed in the neurons of the developing retina, and could play a role in the neuronal differentiation of the developing retina (2). Other recent studies suggest that the disruption of glutamate receptors at the Shank postsynaptic platform could contribute to the destruction of the postsynaptic density, which underlies the synaptic dysfunction and loss in Alzheimer's disease (3).
Gene ID:	171093
UniProt:	<a href="#">Q9QX74</a>

## Application Details

Application Notes:	<ul style="list-style-type: none"><li>• WB (1:1000)</li><li>• IHC (1:1000)</li><li>• ICC/IF (1:100)</li><li>• optimal dilutions for assays should be determined by the user.</li></ul>
Comment:	1 µg/ml of ABIN863120 was sufficient for detection of Shank1-4 in 10 µg of rat brain lysate by colorimetric immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody.
Restrictions:	For Research Use only

## Handling

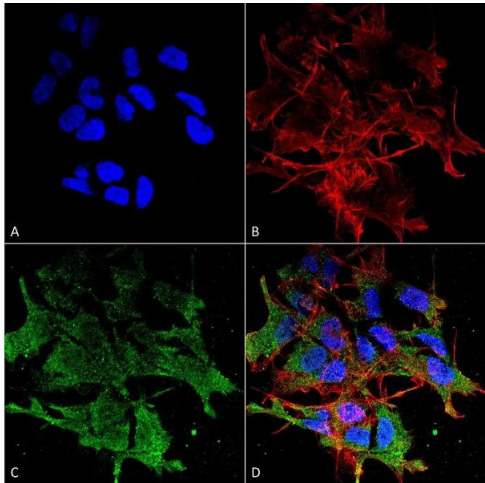
Format:	Liquid
Concentration:	1 mg/mL
Buffer:	PBS pH 7.4, 50 % glycerol, 0.09 % sodium azide, Storage buffer may change when conjugated
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	-20°C

Publications

Product cited in: Voth, Gwin, Francis, Balczon, Frank, Pittet, Wagener, Moser, Alexeyev, Housley, Audia, Piechocki, Madera, Simmons, Crawford, Stevens: "Virulent *Pseudomonas aeruginosa* infection converts antimicrobial amyloids into cytotoxic prions." in: **FASEB journal : official publication of the Federation of American Societies for Experimental Biology**, Vol. 34, Issue 7, pp. 9156-9179, (2020) ([PubMed](#)).

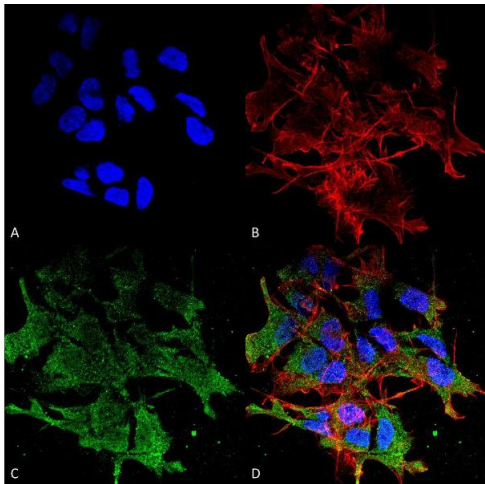
Epelbaum, Youssef, Lacor, Chaurand, Duplus, Brugg, Duyckaerts, Delatour: "Acute amnestic encephalopathy in amyloid- $\beta$  oligomer-injected mice is due to their widespread diffusion in vivo." in: **Neurobiology of aging**, Vol. 36, Issue 6, pp. 2043-52, (2015) ([PubMed](#)).

Images



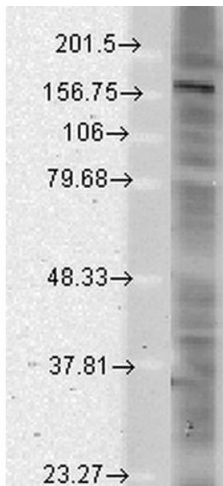
Immunocytochemistry

**Image 1.** Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-SHANK (pan) Monoclonal Antibody, Clone S23b-49 (ABIN863120). Tissue: Neuroblastoma cell line (SK-N-BE). Species: Human. Fixation: 4 % Formaldehyde for 15 min at RT. Primary Antibody: Mouse Anti-SHANK (pan) Monoclonal Antibody (ABIN863120) at 1:100 for 60 min at RT. Secondary Antibody: Goat Anti-Mouse ATTO 488 at 1:200 for 60 min at RT. Counterstain: Phalloidin Texas Red F-Actin stain, DAPI (blue) nuclear stain at 1:1000, 1:5000 for 60 min at RT, 5 min at RT. Localization: Cytoplasm . Magnification: 60X. (A) DAPI (blue) nuclear stain. (B) Phalloidin Texas Red F-Actin stain. (C) SHANK (pan) Antibody. (D) Composite.



**Immunofluorescence (fixed cells)**

**Image 2.** Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-SHANK (pan) Monoclonal Antibody, Clone S23b-49 . Tissue: Neuroblastoma cell line (SK-N-BE). Species: Human. Fixation: 4% Formaldehyde for 15 min at RT. Primary Antibody: Mouse Anti-SHANK (pan) Monoclonal Antibody at 1:100 for 60 min at RT. Secondary Antibody: Goat Anti-Mouse ATTO 488 at 1:200 for 60 min at RT. Counterstain: Phalloidin Texas Red F-Actin stain; DAPI (blue) nuclear stain at 1:1000, 1:5000 for 60 min at RT, 5 min at RT. Localization: Cytoplasm . Magnification: 60X. (A) DAPI (blue) nuclear stain (B) Phalloidin Texas Red F-Actin stain (C) SHANK (pan) Antibody (D) Composite.



**Western Blotting**

**Image 3.** Western Blot analysis of Rat brain membrane lysate showing detection of SHANK protein using Mouse Anti-SHANK Monoclonal Antibody, Clone S23b-49 . Load: 15 µg. Block: 1.5% BSA for 30 minutes at RT. Primary Antibody: Mouse Anti-SHANK 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 4 images are available for ABIN863120.