# abcam

# Product datasheet

# Anti-SHANK3 antibody [N69/46] ab193307

# 2 References 2 图像

#### 概述

产品名称 Anti-SHANK3抗体[N69/46]

**宿主** Mouse

经测试应用 适用于: ICC/IF, WB

种属反应性 与反应: Mouse, Rat, Human

免疫原 Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

阳性对照 ICC/IF: U20S cells. Mouse cerebellum, rat cortex, rat brain membrane and human cortex lysates

gave a positive result in WB.

常规说明

This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or

conjugation for your experiments, please contact orders@abcam.com.

The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

#### 性能

形式 Liquid

存放说明 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Store at -20°C.

**存储溶液** pH: 7.40

Preservative: 0.02% Sodium azide Constituents: PBS, 6.97% L-Arginine

纯**度** Protein G purified

 克隆
 单克隆

 克隆编号
 N69/46

 同种型
 IgG2b

# The Abpromise guarantee

#### Abpromise™承诺保证使用ab193307于以下的经测试应用

"应用说明"部分 下显示的仅为推荐的起始稀释度:实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
ICC/IF		Use a concentration of 5 µg/ml.
WB		Use a concentration of 1 - 5 µg/ml. Detects a band of approximately 186 kDa (predicted molecular weight: 186 kDa).

#### 靶标

## 功能

Seems to be an adapter protein in the postsynaptic density (PSD) of excitatory synapses that interconnects receptors of the postsynaptic membrane including NMDA-type and metabotropic glutamate receptors via complexes with GKAP/PSD-95 and Homer, respectively, and the actin-based cytoskeleton. May play a role in the structural and functional organization of the dendritic spine and synaptic junction.

#### 组织特异性

## 疾病相关

Expressed in the cerebral cortex and the cerebellum.

Note=A chromosomal aberration involving SHANK3 is found in patients with chromosome 22q13.3 deletion syndrome. Translocation t(12;22)(q24.1;q13.3) with APPL2/DIP13B. Note=Defects in SHANK3 are associated with autism spectrum disorders (ASD). ASD are characterized by impairments in reciprocal social interaction and communication as well as restricted and stereotyped patterns of interest and activities. ASD include forms with moderate to severe cognitive impairment and milder forms with higher cognitive ability (Asperger syndrome). Defects in SHANK3 are the cause of schizophrenia type 15 (SCZD15) [MIM:613950]. SCZD15 is a complex, multifactorial psychotic disorder or group of disorders characterized by disturbances in the form and content of thought (e.g. delusions, hallucinations), in mood (e.g. inappropriate affect), in sense of self and relationship to the external world (e.g. loss of ego boundaries, withdrawal), and in behavior (e.g bizarre or apparently purposeless behavior). Although it affects emotions, it is distinguished from mood disorders in which such disturbances are primary. Similarly, there may be mild impairment of cognitive function, and it is distinguished from the dementias in which disturbed cognitive function is considered primary. Some patients manifest schizophrenic as well as bipolar disorder symptoms and are often given the diagnosis of schizoaffective disorder.

#### 序列相似性

Contains 6 ANK repeats.

Contains 1 PDZ (DHR) domain.

Contains 1 SAM (sterile alpha motif) domain.

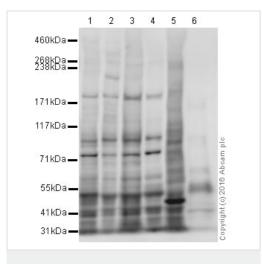
Contains 1 SH3 domain.

#### 细胞定位

 ${\it Cytoplasm. Cell junction > synapse. Cell junction > synapse > postsynaptic cell membrane > }$ 

postsynaptic density. Postsynaptic density of neuronal cells.

#### 图片



Western blot - Anti-SHANK3 antibody [N69/46] (ab193307)

All lanes: Anti-SHANK3 antibody [N69/46] (ab193307) at 5 µg/ml

Lane 1 : Cerebellum Mouse Tissue Lysate

Lane 2: Rat Cortex

Lane 3: Rat brain normal tissue lysate - membrane extract

(ab29473)

Lane 4: Human Cortex

Lane 5: Human Striatum Neuronal cell lysate

Lane 6: Human liver tissue lysate - total protein (ab29889)

Lysates/proteins at 20 µg per lane.

# Secondary

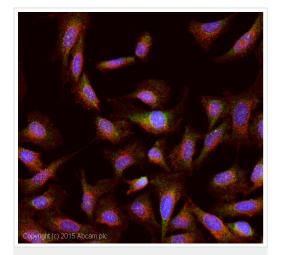
**All lanes :** Goat polyclonal to Mouse IgG - H&L - Pre-Adsorbed (HRP) at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

**Predicted band size:** 186 kDa **Observed band size:** 186 kDa

Exposure time: 4 minutes



Immunocytochemistry/ Immunofluorescence - Anti-SHANK3 antibody [N69/46] (ab193307)

ab193307 stained U20S cells. The cells were 100% methanol fixed for 5 minutes at -20°C and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1hour at room temperature to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab193307 at 5 $\mu$ g/ml) overnight at +4°C. The secondary antibody (pseudo-colored green) was Goat Anti-Mouse lgG H&L (Alexa Fluor® 488) preadsorbed (ab150117) used at a 1/1000 dilution for 1hour at room temperature. Alexa Fluor® 594 WGA was used to label plasma membranes (pseudo-colored red) at a 1/200 dilution for 1hour at room temperature. DAPI was used to stain the cell nuclei (pseudo-colored blue) at a concentration of 1.43 $\mu$ M for 1hour at room temperature.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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