

Rabbit SHANK3 Polyclonal Antibody | anti-SHANK3 antibody

Anti-SHANK3 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA19237	Rabbit	Human, Mouse, Rat	Western Blot, Immunohistochemistry, Flow Cytometry, Functional Assay, ELISA

PRODUCT SYNONYMS

SHANK3; Polyclonal Antibody; Anti-SHANK3 Antibody; KIAA1650; PROSAP2; PSAP2; SH3 and multiple ankyrin repeat domains protein 3; Shank3; Proline-rich synapse-associated protein 2; ProSAP2; SH3 and multiple ankyrin repeat domains 3; anti-SHANK3 antibody

PRODUCT SPECIFICATIONS

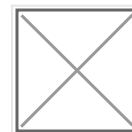
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.01mg NaN ₃ .
Applicable Applications for anti-SHANK3 antibody	WB (Western Blot), IHC (Immunohistochemistry), FCM/FACS (Flow Cytometry), ELISA
Application Notes	Western blot, 0.1-0.25ug/ml, Mouse, Rat; Immunohistochemistry (Paraffin-embedded Section), 2-5ug/ml, Human, Rat; Flow Cytometry (Fixed), 1-3ug/1x10 ⁶ cells, Human, Mouse, Rat; ELISA, 0.1-0.5ug/ml
Immunogen	E Coli-derived human SHANK3 recombinant protein (Position: E1391-H1698).
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Cross Reactivity	No cross-reactivity with other proteins.
Recommended Detection Systems	Lab recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit
Preparation and Storage	Store at -20C for one year from date of receipt. After reconstitution, at 4C for one month. It can also be aliquotted and stored frozen at -20C for six months. Avoid repeated freeze-thaw cycles.

IMAGES



FCM (Flow Cytometry)

Figure 6. Flow Cytometry analysis of NRK cells using anti-SHANK3 antibody (AAA19237). Overlay histogram showing NRK cells stained with AAA19237 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-SHANK3 Antibody (AAA19237, 1µg/1x10⁶ cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG (5-10µg/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1µg/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



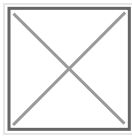
FCM (Flow Cytometry)

Figure 5. Flow Cytometry analysis of HEPA1-6 cells using anti-SHANK3 antibody (AAA19237). Overlay histogram showing HEPA1-6 cells stained with AAA19237 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-SHANK3 Antibody (AAA19237, 1µg/1x10⁶ cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG (5-10µg/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1µg/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



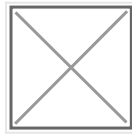
FCM (Flow Cytometry)

Figure 4. Flow Cytometry analysis of Raji cells using anti-SHANK3 antibody (AAA19237).Overlay histogram showing Raji cells stained with AAA19237 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-SHANK3 Antibody (AAA19237,1μg/1x106 cells) for 30 min at 20 degree C. DyLight®488 conjugated goat anti-rabbit IgG (5-10μg/1x106 cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1μg/1x106) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



IHC (Immunohistochemistry)

IHC analysis of SHANK3 using anti-SHANK3 antibody. SHANK3 was detected in a paraffin-embedded section of human cerebellum tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-SHANK3 Antibody overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit with DAB as the chromogen.



IHC (Immunohistochemistry)

Figure 2. IHC analysis of SHANK3 using anti SHANK3 antibody.SHANK3 was detected in paraffin-embedded section of human meningoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2μg/ml rabbit anti-SHANK3 Antibody overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # with DAB as the chromogen.



WB (Western Blot)

Figure 1. Western blot analysis of SHANK3 using anti-SHANK3 antibody (AAA19237).Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.Lane 1: rat brain tissue lysatesLane 2: mouse brain tissue lysates.After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1. 5 hour at RT. The membrane was incubated with rabbit anti-SHANK3 antigen affinity purified polyclonal antibody at 0. 25 μg/mL overnight at 4 degree C, then washed with TBS-0. 1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1. 5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # with Tanon 5200 system. A specific band was detected for SHANK3 at approximately 180-190KD. The expected band size for SHANK3 is at 185KD.

ADDITIONAL INFORMATION

Related Product Information for anti-SHANK3 antibody	SH3 and multiple ankyrin repeat domains 3 (Shank3), also known as proline-rich synapse-associated protein 2 (ProSAP2), is a protein that in humans is encoded by the SHANK3 gene. This gene is a member of the Shank gene family. Shank proteins are multidomain scaffold proteins of the postsynaptic density that connect neurotransmitter receptors, ion channels, and other membrane proteins to the actin cytoskeleton and G-proteincoupled signaling pathways. Additionally, Shank proteins play a role in synapse formation and dendritic spine maturation. Mutations in this gene are a cause of autism spectrum disorder (ASD), which is characterized by impairments in social interaction and communication, and restricted behavioral patterns and interests. Mutations in this gene also cause schizophrenia type 15, and are a major causative factor in the neurological symptoms of 22q13.3 deletion syndrome, which is also known as Phelan-McDermid syndrome. Additional isoforms have been described for this gene but they have not yet been experimentally verified.
References	1. "Entrez Gene: SHANK3 SH3 and multiple ankyrin repeat domains 3". 2. Boeckers TM, Bockmann J, Kreutz MR, Gundelfinger ED (2002). "ProSAP/Shank proteins - a family of higher order organizing molecules of the postsynaptic density with an emerging role in human neurological disease". J. Neurochem. 81 (5): 903-10.

NCBI AND UNIPROT INFORMATION

NCBI GI #	122937241
NCBI GeneID	85358
NCBI Accession #	NP_001073889
NCBI GenBank Nucleotide #	NM_001080420.1
UniProt Accession #	Q9BYB0; Q8TET3; D7UT47
NCBI Official Synonym Full Names	SH3 and multiple ankyrin repeat domains 3
NCBI Official Symbol	SHANK3

NCBI Official Synonym Symbols	PSAP2; SCZD15; PROSAP2; SPANK-2; DEL22q13.3
NCBI Protein Information	SH3 and multiple ankyrin repeat domains protein 3
UniProt Protein Name	SH3 and multiple ankyrin repeat domains protein 3
UniProt Gene Name	SHANK3
UniProt Synonym Gene Names	KIAA1650; PROSAP2; PSAP2; Shank3; ProSAP2
UniProt Entry Name	SHAN3_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/shank3-antibody-western-blot-immunohistochemistry-flow-cytometry-elisa/19237>