

Rabbit SYNGAP1 Polyclonal Antibody | anti-SYNGAP1 antibody

Anti-SYNGAP1 Antibody Picoband

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA127260	Rabbit	Human, Mouse, Rat	ELISA, Flow Cytometry, Functional Assay, Western Blot

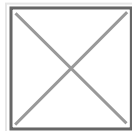
PRODUCT SYNONYMS

SYNGAP1; Polyclonal Antibody; Anti-SYNGAP1 Antibody Picoband; anti-SYNGAP1 antibody

PRODUCT SPECIFICATIONS

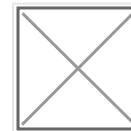
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ .
Applicable Applications for anti-SYNGAP1 antibody	ELISA, FCM/FACS (Flow Cytometry), WB (Western Blot)
Immunogen	E coli-derived human SYNGAP1 recombinant protein (Position: R3-R1175). Human SYNGAP1 shares 99% and 99.1% amino acid (aa) sequence identity with mouse and rat SYNGAP1, respectively.
Reconstitution	Adding 0.2 ml of distilled water will yield a concentration of 500ug/ml.
Preparation and Storage	At -20 degree C for one year from date of receipt. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for six months.Avoid repeated freezing and thawing.

IMAGES



FCM/FACS (Flow Cytometry)

Figure 2. Flow Cytometry analysis of K562 cells using anti-SYNGAP1 antibody (AAA127260). Overlay histogram showing K562 cells stained with AAA127260 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-SYNGAP1 Antibody (AAA127260, 1ug/1x10⁶ cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



WB (Western Blot)

Figure 1. Western blot analysis of SYNGAP1 using anti-SYNGAP1 antibody (AAA127260). 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 30 ug of sample under reducing conditions. Lane 1: rat brain tissue lysates, Lane 2: mouse brain tissue lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA 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-SYNGAP1 antigen affinity purified polyclonal antibody (#AAA127260) at 0.5ug/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 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for SYNGAP1 at approximately 148 kDa. The expected band size for SYNGAP1 is at 148 kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-SYNGAP1 antibody

The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.

Product Categories/Family for anti-SYNGAP1 antibody	Primary Antibodies
References	1. Berryer, M. H., Hamdan, F. F., Klitten, L. L., Moller, R. S., Carmant, L., Schwartzentruber, J., Patry, L., Dobrzyniecka, S., Rochefort, D., Neugnot-Ceroli, M., Lacaille, J.-C., Niu, Z., and 15 others. Mutations in SYNGAP1 cause intellectual disability, autism, and a specific form of epilepsy by inducing haploinsufficiency. Hum. Mutat. 34: 385-394, 2013. 2. Carvill, G. L., Heavin, S. B., Yendle, S. C., McMahon, J. M., O'Roak, B. J., Cook, J., Khan, A., Dorschner, M. O., Weaver, M., Calvert, S., Malone, S., Wallace, G., and 22 others. Targeted resequencing in epileptic encephalopathies identifies de novo mutations in CHD2 and SYNGAP1. Nature Genet. 45: 825-830, 2013. 3. Chen, H.-J., Rojas-Soto, M., Oguni, A., Kennedy, M. B. A synaptic Ras-GTPase activating protein (p135 SynGAP) inhibited by CaM kinase II. Neuron 20: 895-904, 1998. Note: Erratum: Neuron 33: 151 only, 2002.

NCBI AND UNIPROT INFORMATION

NCBI GI #	150421676
NCBI GeneID	8831
UniProt Accession #	Q96PV0; Q8TCS2; Q9UGE2; A2AB17; A2BEL6; A2BEL7; A8MQC4
Molecular Weight	1343
NCBI Official Full Name	Ras/Rap GTPase-activating protein SynGAP
NCBI Official Synonym Full Names	synaptic Ras GTPase activating protein 1
NCBI Official Symbol	SYNGAP1
NCBI Official Synonym Symbols	MRD5; RASA1; RASA5; SYNGAP
NCBI Protein Information	ras/Rap GTPase-activating protein SynGAP; neuronal RasGAP; Ras GTPase-activating protein SynGAP; synaptic Ras GTPase-activating protein 1; synaptic Ras GTPase activating protein, 135kDa; synaptic Ras GTPase activating protein 1 homolog
UniProt Protein Name	Ras/Rap GTPase-activating protein SynGAP
UniProt Gene Name	SYNGAP1
UniProt Synonym Gene Names	KIAA1938; Synaptic Ras-GAP 1
UniProt Entry Name	SYGP1_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.