

Rabbit anti-Human RAPGEF2 Polyclonal Antibody | anti-RAPGEF2 antibody

Anti-RAPGEF2 Antibody

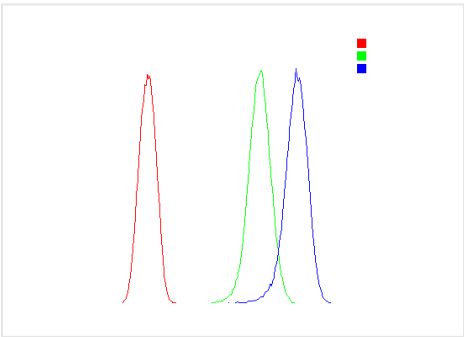
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA125728	Rabbit	Human	ELISA, Flow Cytometry, Functional Assay, Western Blot

PRODUCT SYNONYMS

RAPGEF2; Polyclonal Antibody; Anti-RAPGEF2 Antibody; KIAA0313; NRAPGEP; PDZGEF1; Rap guanine nucleotide exchange factor 2; Cyclic nucleotide ras GEF; CNrasGEF; Neural RAP guanine nucleotide exchange protein; nRap GEP; PDZ domain-containing guanine nucleotide exchange factor 1; PDZ-GEF1; RA-GEF-1; Ras/Rap1-associating GEF-1; anti-RAPGEF2 antibody

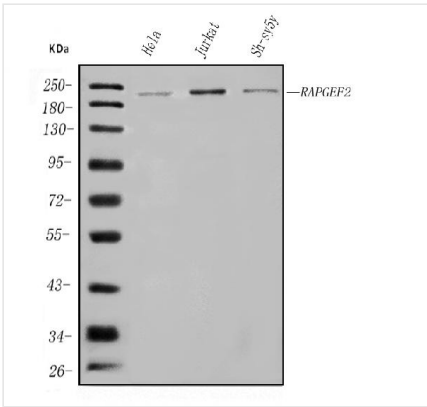
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Rabbit IgG polyclonal antibody for RAPGEF2 detection.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4mg Trehalose, 0.9mg NaCl and 0.2mg Na2HPO4.
Applicable Applications for anti-RAPGEF2 antibody	ELISA (Direct ELISA), FCM/FACS (Flow Cytometry), WB (Western Blot)
Immunogen	E Coli-derived human RAPGEF2 recombinant protein (Position: S1266-V1499).
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Recommended Detection Systems	Recommended Detection Systems
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.



FCM/FACS (Flow Cytometry)

Figure 2. Flow Cytometry analysis of HELA cells using anti-RAPGEF2 antibody (AAA125728).Overlay histogram showing HELA cells stained with AAA125728 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-RAPGEF2 Antibody (AAA125728, 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.



WB (Western Blot)

Figure 1. Western blot analysis of RAPGEF2 using anti-RAPGEF2 antibody (AAA125728).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: human HELA whole cell lysatesLane 2: human Jurkat whole cell lysatesLane 3: human SH-SY5Y whole cell 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-RAPGEF2 antigen affinity purified polyclonal antibody (Catalog # AAA125728) at 0. 5 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 1:5000 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 RAPGEF2 at approximately 200-220KD. The expected band size for RAPGEF2 is at 200-220KD.

ADDITIONAL INFORMATION

Related Product Information for anti-RAPGEF2 antibody	Rap guanine nucleotide exchange factor 2 is a protein that in humans is encoded by the RAPGEF2 gene. Members of the RAS subfamily of GTPases function in signal transduction as GTP/GDP-regulated switches that cycle between inactive GDP- and active GTP-bound states. Guanine nucleotide exchange factors (GEFs), such as RAPGEF2, serve as RAS activators by promoting acquisition of GTP to maintain the active GTP-bound state and are the key link between cell surface receptors and RAS activation.
References	1. de Rooij, J., Boenink, N. M., van Triest, M., Cool, R. H., Wittinghofer, A., Bos, J. L. PDZ-GEF1, a guanine nucleotide exchange factor specific for Rap1 and Rap2. J. Biol. Chem. 274: 38125-38130, 1999. 2. Ishiura, H., Doi, K., Mitsui, J., Yoshimura, J., Matsukawa, M. K., Fujiyama, A., Toyoshima, Y., Kakita, A., Takahashi, H., Suzuki, Y., Sugano, S., Qu, W., and 55 others. Expansions of intronic TTTCa and TTTTA repeats in benign adult familial myoclonic epilepsy. Nature Genet. 50: 581-590, 2018. 3. Kawajiri, A., Itoh, N., Fukata, M., Nakagawa, M., Yamaga, M., Iwamatsu, A., Kaibuchi, K. Identification of a novel beta-catenin-interacting protein. Biochem. Biophys. Res. Commun. 273: 712-717, 2000.

NCBI AND UNIPROT INFORMATION

NCBI GI #	7657261
NCBI GeneID	9693
NCBI Accession #	NP_055062.1
NCBI GenBank Nucleotide #	NM_014247.2
UniProt Accession #	Q9Y4G8; D3DP27
Molecular Weight	167,417 Da
NCBI Official Full Name	rap guanine nucleotide exchange factor 2
NCBI Official Synonym Full Names	Rap guanine nucleotide exchange factor (GEF) 2

NCBI Official Symbol	RAPGEF2
NCBI Official Synonym Symbols	RA-GEF; NRAPGEP; PDZGEF1; Rap-GEP; CNrasGEF; PDZ-GEF1; RA-GEF-1; nRap GEP
NCBI Protein Information	rap guanine nucleotide exchange factor 2; cyclic nucleotide ras GEF; ras/Rap1-associating GEF-1; RA(Ras/Rap1A-associating)-GEF; neural RAP guanine nucleotide exchange protein; PDZ domain-containing guanine nucleotide exchange factor 1; PDZ domain containi
UniProt Protein Name	Rap guanine nucleotide exchange factor 2
UniProt Gene Name	RAPGEF2
UniProt Synonym Gene Names	KIAA0313; NRAPGEP; PDZGEF1; CNrasGEF; nRap GEP; PDZ-GEF1
UniProt Entry Name	RPGF2_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.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com

Online datasheet: <https://www.aaabiotech.com/polyclonal/rapgef2-antibody-direct-elisa-flow-cytometry-western-blot-elisa/125728>