

Rabbit GRK2 Polyclonal Antibody | anti-GRK2 antibody

Anti-GRK2 Antibody

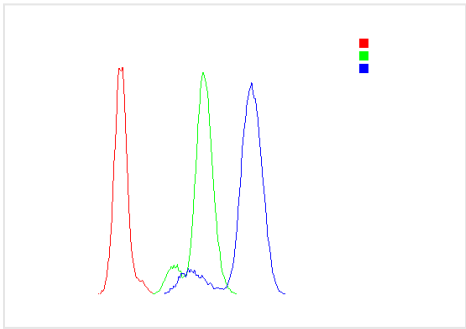
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA125829	Rabbit	Human, Mouse, Rat, Monkey	Flow Cytometry, Functional Assay, Immunofluorescence, Immunocytochemistry, Western Blot

PRODUCT SYNONYMS

GRK2; Polyclonal Antibody; Anti-GRK2 Antibody; ADRBK1; BARK; BARK1; Beta-adrenergic receptor kinase 1; Beta-ARK-1; EC 2. 7. 11. 15; G-protein coupled receptor kinase 2; G protein-coupled receptor kinase 2; anti-GRK2 antibody

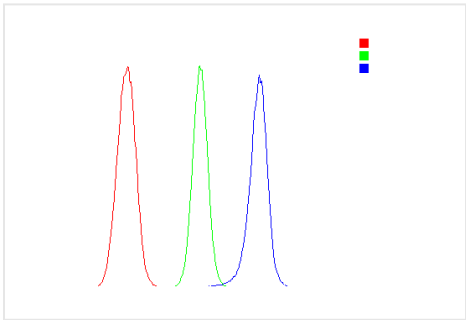
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat, Monkey
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Rabbit IgG polyclonal antibody for GRK2 detection.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na2HPO4, 0.01mg NaN3.
Applicable Applications for anti-GRK2 antibody	FCM/FACS (Flow Cytometry), IF (Immunofluorescence), ICC (Immunocytochemistry), WB (Western Blot)
Immunogen	A synthetic peptide corresponding to a sequence of human GRK2 (KKELRDYREAQQLVQRV).
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Recommended Detection Systems	We recommend Enhanced Chemiluminescent Kit with anti-Rabbit IgG () for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit () for IHC(P) and ICC.
Preparation and Storage	Store at -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for 6 months. Avoid repeated freezing and thawing.



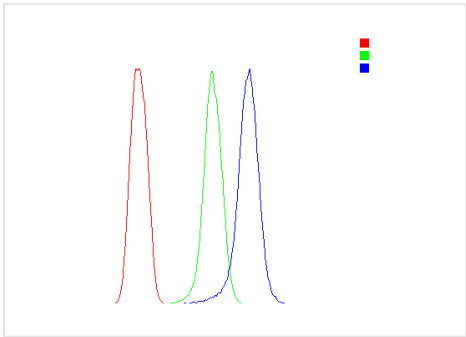
FCM/FACS (Flow Cytometry)

Figure 5. Flow Cytometry analysis of U937 cells using anti-GRK2 antibody (AAA125829).Overlay histogram showing U937 cells stained with AAA125829 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-GRK2 Antibody (AAA125829, 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.



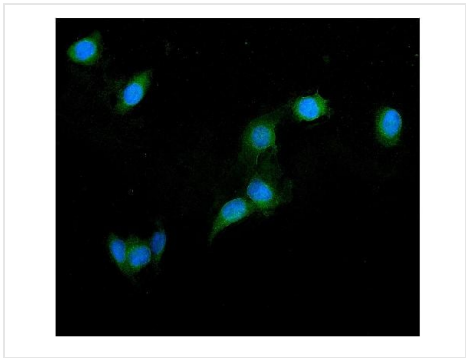
FCM/FACS (Flow Cytometry)

Figure 4. Flow Cytometry analysis of RH35 cells using anti-GRK2 antibody (AAA125829).Overlay histogram showing RH35 cells stained with AAA125829 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-GRK2 Antibody (AAA125829, 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.



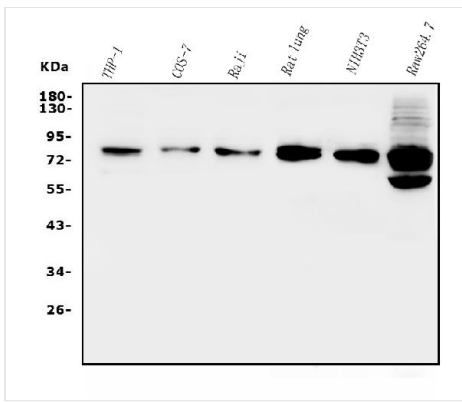
FCM/FACS (Flow Cytometry)

Figure 3. Flow Cytometry analysis of HEPA1-6 cells using anti-GRK2 antibody (AAA125829).Overlay histogram showing HEPA1-6 cells stained with AAA125829 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-GRK2 Antibody (AAA125829, 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.



IF (Immunofluorescence)

Figure 2. IF analysis of GRK2 using anti- GRK2 antibody (AAA125829).GRK2 was detected in immunocytochemical section of U20S cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5μg/mL rabbit anti- GRK2 Antibody (AAA125829) overnight at 4 degree C. DyLight®488 Conjugated Goat Anti-Rabbit IgG was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37 degree C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



WB (Western Blot)

Figure 1. Western blot analysis of GRK2 using anti-GRK2 antibody (AAA125829). 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 THP-1 whole cell lysates Lane 2: monkey COS-7 whole cell lysates Lane 3: human Raji whole cell lysates Lane 4: rat lung tissue lysates Lane 5: mouse NTH/3T3 whole cell lysate Lane 6: mouse Raw264. 7 whole cell lysate. 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-GRK2 antigen affinity purified polyclonal antibody (Catalog # AAA125829) 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 GRK2 at approximately 80KD. The expected band size for GRK2 is at 80KD.

ADDITIONAL INFORMATION

Related Product Information for anti-GRK2 antibody	Beta adrenergic receptor kinase (also referred to as betaARK or BARK) is a serine/threonine intracellular kinase. The product of this gene phosphorylates the beta-2-adrenergic receptor and appears to mediate agonist-specific desensitization observed at high agonist concentrations. This protein is an ubiquitous cytosolic enzyme that specifically phosphorylates the activated form of the beta-adrenergic and related G-protein-coupled receptors. Abnormal coupling of beta-adrenergic receptor to G protein is involved in the pathogenesis of the failing heart.
References	- Benovic JL, DeBlasi A, Stone WC, Caron MG, Lefkowitz RJ (1989). "Beta-adrenergic receptor kinase: primary structure delineates a multigene family". <i>Science</i>. 246 (4927): 235-40. - Pippig S, Andexinger S, Daniel K, Puzicha M, Caron MG, Lefkowitz RJ, Lohse MJ (1993). "Overexpression of beta-arrestin and beta-adrenergic receptor kinase augment desensitization of beta 2-adrenergic receptors". <i>J. Biol. Chem</i>. 268 (5): 3201-8.

NCBI AND UNIPROT INFORMATION

NCBI GI #	148539876
NCBI GeneID	156
NCBI Accession #	NP_001610.2
NCBI GenBank Nucleotide #	NM_001619.3
UniProt Accession #	P25098; Q13837; Q6GTT3; B0ZBE1
NCBI Official Full Name	beta-adrenergic receptor kinase 1
NCBI Official Synonym Full Names	adrenergic, beta, receptor kinase 1
NCBI Official Symbol	ADRBK1
NCBI Official Synonym Symbols	GRK2; BARK1; BETA-ARK1
NCBI Protein Information	beta-adrenergic receptor kinase 1; beta-ARK-1; G-protein coupled receptor kinase 2

UniProt Protein Name	Beta-adrenergic receptor kinase 1
UniProt Gene Name	ADRBK1
UniProt Synonym Gene Names	BARK; BARK1; GRK2; Beta-ARK-1
UniProt Entry Name	ARBK1_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/grk2-antibody-flow-cytometry-immunofluorescence-immunocytochemistry-western-blot-elisa/125829>