

Rabbit KCNJ16 Polyclonal Antibody | anti-KCNJ16 antibody

Anti-KCNJ16 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA125815	Rabbit	Human, Monkey	Flow Cytometry, Functional Assay, Western Blot

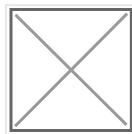
PRODUCT SYNONYMS

KCNJ16; Polyclonal Antibody; Anti-KCNJ16 Antibody; Inward rectifier potassium channel 16; Inward rectifier K(+) channel Kir5. 1; Potassium channel; inwardly rectifying subfamily J member 16; potassium inwardly rectifying channel subfamily J member 16; anti-KCNJ16 antibody

PRODUCT SPECIFICATIONS

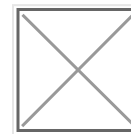
Host	Rabbit
Reactivity	Human, Monkey
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Rabbit IgG polyclonal antibody for KCNJ16 detection.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.01mg NaN ₃ .
Applicable Applications for anti-KCNJ16 antibody	FCM/FACS (Flow Cytometry), WB (Western Blot)
Immunogen	E Coli-derived human KCNJ16 recombinant protein (Position: M1-M418).
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.

IMAGES



FCM/FACS (Flow Cytometry)

Figure 2. Flow Cytometry analysis of U87 cells using anti-KCNJ16 antibody (AAA125815). Overlay histogram showing U87 cells stained with AAA125815 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-KCNJ16 Antibody (AAA125815, 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.



WB (Western Blot)

Figure 1. Western blot analysis of KCNJ16 using anti-KCNJ16 antibody (AAA125815). 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 30ug of sample under reducing conditions. Lane 1: human CACO-2 whole cell lysates Lane 2: human HEK293 whole cell lysates Lane 3: human HL-60 whole cell lysates Lane 4: monkey kidney 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-KCNJ16 antigen affinity purified polyclonal antibody (Catalog # AAA125815) 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 KCNJ16 at approximately 48KD. The expected band size for KCNJ16 is at 48KD.

ADDITIONAL INFORMATION

Related Product Information for anti-KCNJ16 antibody	Potassium inwardly-rectifying channel, subfamily J, member 16 (KCNJ16) is a human gene encoding the Kir5. 1 protein. Potassium channels are present in most mammalian cells, where they participate in a wide range of physiologic responses. The protein encoded by this gene is an integral membrane protein and inward-rectifier type potassium channel. The encoded protein, which tends to allow potassium to flow into rather than out of a cell, can form heterodimers with two other inward-rectifier type potassium channels. It may function in fluid and pH balance regulation. Alternatively spliced transcript variants have been found for this gene.
References	1. D'Adamo, M. C., Shang, L., Imbrici, P., Brown, S. D. M., Pessia, M., Tucker, S. J. Genetic inactivation of Kcnj16 identifies Kir5. 1 as an important determinant of neuronal PCO2/pH sensitivity. J. Biol. Chem. 286: 192-198, 2011. 2. Derst, C., Karschin, C., Wischmeyer, E., Hirsch, J. R., Preisig-Muller, R., Rajan, S., Engel, H., Grzeschik, K. -H., Daut, J., Karschin, A. Genetic and functional linkage of Kir5. 1 and Kir2. 1 channel subunits. FEBS Lett. 491: 305-311, 2001. 3. Liu, Y., McKenna, E., Figueroa, D. J., Blevins, R., Austin, C. P., Bennett, P. B., Swanson, R. The human inward rectifier K+ channel subunit Kir5. 1 (KCNJ16) maps to chromosome 17q25 and is expressed in kidney and pancreas. Cytogenet. Cell Genet. 90: 60-63, 2000.

NCBI AND UNIPROT INFORMATION

NCBI GI #	8923823
NCBI GeneID	3773
NCBI Accession #	NP_061128.1
NCBI GenBank Nucleotide #	NM_018658.2
UniProt Accession #	Q9NPI9
Molecular Weight	47,949 Da
NCBI Official Full Name	inward rectifier potassium channel 16
NCBI Official Synonym Full Names	potassium inwardly-rectifying channel, subfamily J, member 16
NCBI Official Symbol	KCNJ16
NCBI Official Synonym Symbols	BIR9; KIR5.1
NCBI Protein Information	inward rectifier potassium channel 16; inward rectifier K+ channel KIR5.1; inward rectifier K(+) channel Kir5.1; potassium channel, inwardly rectifying subfamily J member 16
UniProt Protein Name	Inward rectifier potassium channel 16
UniProt Gene Name	KCNJ16
UniProt Entry Name	KCJ16_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.