

Rabbit Kir6. 1/KCNJ8 Polyclonal Antibody | anti-KCNJ8 antibody

Anti-Kir6. 1/KCNJ8 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA125737	Rabbit	Human, Mouse, Rat	ELISA, Flow Cytometry, Functional Assay, Immunohistochemistry, Western Blot

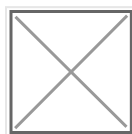
PRODUCT SYNONYMS

Kir6. 1/KCNJ8; Polyclonal Antibody; Anti-Kir6. 1/KCNJ8 Antibody; Kcnj8; ATP-sensitive inward rectifier potassium channel 8; Inward rectifier K(+) channel Kir6. 1; Potassium channel; inwardly rectifying subfamily J member 8; uKATP-1; potassium inwardly rectifying channel subfamily J member 8; anti-KCNJ8 antibody

PRODUCT SPECIFICATIONS

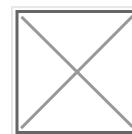
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Rabbit IgG polyclonal antibody for Kir6. 1/KCNJ8 detection.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4mg Trehalose, 0.9mg NaCl and 0.2mg Na ₂ HPO ₄ .
Applicable Applications for anti-KCNJ8 antibody	ELISA (Direct ELISA), FCM/FACS (Flow Cytometry), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	E Coli-derived human Kir6. 1/KCNJ8 recombinant protein (Position: M1-S424).
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 3. Flow Cytometry analysis of U2OS cells using anti-Kir6. 1/KCNJ8 antibody (AAA125737). Overlay histogram showing U2OS cells stained with AAA125737 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Kir6. 1/KCNJ8 Antibody (AAA125737, 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)

Figure 2. IHC analysis of Kir6. 1/KCNJ8 using anti-Kir6. 1/KCNJ8 antibody (AAA125737). Kir6. 1/KCNJ8 was detected in paraffin-embedded section of human pancreatic cancer 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-Kir6. 1/KCNJ8 Antibody (AAA125737) 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) with DAB as the chromogen.



WB (Western Blot)

Figure 1. Western blot analysis of Kir6. 1/KCNJ8 using anti-Kir6. 1/KCNJ8 antibody (AAA125737). 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 CACO-2 whole cell lysates Lane 2: human SH-SY5Y whole cell lysates Lane 3: human HEK293 whole cell lysates Lane 4: human K562 whole cell lysates Lane 5: human A549 whole cell lysates Lane 6: rat RH35 whole cell lysates Lane 7: mouse kidney tissue lysates Lane 8: mouse HEPA1-6 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-Kir6. 1/KCNJ8 antigen affinity purified polyclonal antibody (Catalog # AAA125737) 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 Kir6. 1/KCNJ8 at approximately 48KD. The expected band size for Kir6. 1/KCNJ8 is at 48KD.

ADDITIONAL INFORMATION

Related Product Information for anti-KCNJ8 antibody	Potassium inwardly-rectifying channel, subfamily J, member 8, also known as KCNJ8, is a human gene encoding the Kir6. 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 has a greater tendency to allow potassium to flow into a cell rather than out of a cell, is controlled by G-proteins. Defects in this gene may be a cause of J-wave syndromes and sudden infant death syndrome (SIDS).
References	<ol style="list-style-type: none">1. Barajas-Martinez, H., Hu, D., Ferrer, T., Onetti, C. G., Wu, Y., Burashnikov, E., Boyle, M., Surman, T., Urrutia, J., Veltmann, C., Schimpf, R., Borggrefe, M., Wolpert, C., Ibrahim, B. B., Sanchez-Chapula, J. A., Winters, S., Haissaguerre, M., Antzelevitch, C. Molecular genetic and functional association of Brugada and early repolarization syndromes with S422L missense mutation in KCNJ8. Heart Rhythm 9: 548-555, 2012.2. Beltrame, J. F., Sasayama, S., Maseri, A. Racial heterogeneity in coronary artery vasomotor reactivity: differences between Japanese and Caucasian patients. J. Am. Coll. Cardiol. 33: 1442-1452, 1999.3. Brownstein, C. A., Towne, M. C., Luquette, L. J., Harris, D. J., Marinakis, N. S., Meinecke, P., Kutsche, K., Campeau, P. M., Yu, T. W., Margulies, D. M., Agrawal, P. B., Beggs, A. H. Mutation of KCNJ8 in a patient with Cantu syndrome with unique vascular abnormalities: support for the role of K(ATP) channels in this condition. Europ. J. Med. Genet. 56: 678-682, 2013.

NCBI AND UNIPROT INFORMATION

NCBI GI #	4826802
NCBI GeneID	3764
NCBI Accession #	NP_004973.1
NCBI GenBank Nucleotide #	NM_004982.3
UniProt Accession #	Q15842; O00657
Molecular Weight	47,968 Da
NCBI Official Full Name	ATP-sensitive inward rectifier potassium channel 8
NCBI Official Synonym Full Names	potassium voltage-gated channel subfamily J member 8
NCBI Official Symbol	KCNJ8
NCBI Official Synonym Symbols	KIR6.1; uKATP-1
NCBI Protein Information	ATP-sensitive inward rectifier potassium channel 8
UniProt Protein Name	ATP-sensitive inward rectifier potassium channel 8

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/kir6-1-kcnj8-antibody-direct-elisa-flow-cytometry-immunohistochemistry-western-blot-elisa/125737>