

Mouse Kir6.1 Monoclonal Antibody | anti-Kir6.1 antibody

Kir6.1 Antibody, Clone S366-60: ATTO 488

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA253963	Mouse	Human, Mouse, Rat	Immunofluorescence, Immunocytochemistry, Immunohistochemistry, Western Blot

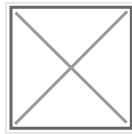
PRODUCT SYNONYMS

Kir6.1; Monoclonal Antibody; Kir6.1 Antibody; Clone S366-60: ATTO 488; Mouse Anti-Rat Kir6.1 Monoclonal IgG2A; Kir6.1 Antibody: ATTO 488; ATP-sensitive inward rectifier potassium channel 8 Antibody; Potassium channel inwardly rectifying subfamily J member 8 Antibody; uKATP-1 Antibody; Kcnj8 Antibody; anti-Kir6.1 antibody

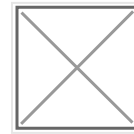
PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Human, Mouse, Rat
Clonality	Monoclonal
Isotype	IgG2A
Clone Number	S366-60
Specificity	Detects ~45 kDa.
Purity/Purification	Protein G Purified
Form/Format	PBS pH 7.4, 50% Glycerol, 0.1% Sodium Azide
Concentration	1 mg/ml (varies by lot)
Sequence Length	424
Applicable Applications for anti-Kir6.1 antibody	IF (Immunofluorescence), ICC (Immunocytochemistry), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen Species	Rat
Immunogen	Fusion protein amino acids 306-424 (Cytoplasmic C-terminus) of rat Kir6.1
Conjugate	ATTO 488
Cellular Localization	Membrane
Certificate of Analysis	A 1:100 dilution was sufficient for detection of Kir6.1 in 20 ug of mouse brain lysate by ECL immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody.
Product Notes	<p>Conjugated primary antibodies can be good options or alternatives to secondary antibody's for detecting a target protein. The lab manufactures a conjugated antibody from a primary parent antibody by attaching (conjugating) an available tag such as a fluorophore or protein, allowing detection of the target protein without using a secondary antibody. Conjugated primary antibodies may potentially be used to replace primary/secondary antibody pairs in various applications, such as Enzyme-Linked Immunosorbent Assay (ELISA), Flow Cytometry, Fluorescence-activated cell sorting, Förster Resonance Energy Transfer (FRET). Immunocytochemistry, Immunofluorescence, Immunohistochemistry, or Western Blot. The suitability of applications for conjugates are user determined and we cannot guarantee that any antibody-conjugate combination has been tested for use in a particular application.</p> <p>Please note: Conjugate tags may potentially bind in the antibody paratope, which can limit binding of the antibody to the antigen. Binding in the antibody paratope may affect the ability of the antibody to bind to the corresponding antigen (protein target) in various species and applications. There is no way to confirm or guarantee the location of the antibody tag as we cannot control the binding of the conjugate to the antibody. Researchers are responsible for evaluating antibody conjugates for the suitability of their applications.</p>

IMAGES

**WB (Western Blot)**

Western Blot analysis of Rat Brain showing detection of ~45 kDa Kir6.1 protein using Mouse Anti-Kir6.1 Monoclonal Antibody, Clone S366-60 at 1:1000 for 16 hours at 4 degree C. Secondary Antibody: Goat Anti-Mouse IgG: HRP at 1:200 for 1 hour at RT. Color Development: ECL solution for 6 min at RT. Predicted/Observed Size: ~45 kDa. Other Band(s): ~100 kDa.

**ICC (Immunocytochemistry)**

Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-Kir6.1 Monoclonal Antibody, Clone S366-60 at 1:100 for 60 min at RT. Secondary Antibody: Goat Anti-Mouse ATTO 488 at 1:100 for 60 min at RT. Counterstain: Phalloidin Texas Red F-Actin stain; DAPI (blue) nuclear stain at 1:1000, 1:5000 for 60min RT, 5min RT. Localization: Membrane. Magnification: 60X. (A) DAPI (blue) nuclear stain. (B) Phalloidin Texas Red F-Actin stain. (C) Kir6.1 Antibody. (D) Composite.

ADDITIONAL INFORMATION

Related Product Information for anti-Kir6.1 antibody	Several different potassium channels are known to be involved with electrical signaling in the nervous system. One class is activated by depolarization whereas a second class is not. The latter are referred to as inwardly rectifying K ⁺ channels, and they have a greater tendency to allow potassium to flow into the cell rather than out of it. This asymmetry in potassium ion conductance plays a key role in the excitability of muscle cells and neurons. The protein encoded by this gene is an integral membrane protein and member of the inward rectifier potassium channel family (1-3). This is predominantly detected in fetal and adult hearts, and defects can be associated with J-wave syndromes, a group of heart disorders characterized by early repolarization events (4).
Product Categories/Family for anti-Kir6.1 antibody	Neuroscience ; Ion channels ; Potassium Channels ; Inward-Rectifying Potassium Channels ; Cancer
References	1. Zobel C., et al. (2003) J Physiol. 550: 365-372. 2. Panama B.K., McLerie M., and Lopatin A.N. (2007) Am J Physiol Heart Circ Physiol. 293: H3558-H3567. 3. Munoz V., et al. (2007) Heart Rhythm. 4(4): 487-496. 4. Aguilar-Bryan L., et al. (1998) Physiol Rev. 78(1): 227-245.

NCBI AND UNIPROT INFORMATION

NCBI GI #	148747200
NCBI GeneID	25472
NCBI Accession #	NP_058795.3
NCBI GenBank Nucleotide #	NP_058795.3
UniProt Accession #	Q63664
NCBI Official Full Name	ATP-sensitive inward rectifier potassium channel 8
NCBI Official Synonym Full Names	potassium inwardly-rectifying channel, subfamily J, member 8
NCBI Official Symbol	Kcnj8
NCBI Official Synonym Symbols	Kir6.1; UKATP1; uKATP-1
NCBI Protein Information	ATP-sensitive inward rectifier potassium channel 8
UniProt Protein Name	ATP-sensitive inward rectifier potassium channel 8
UniProt Gene Name	Kcnj8
UniProt Entry Name	KCNJ8_RAT

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.

