Recombinant Human KCNJ10 protein, His/SUMO-tagged

Cat. No. KCNJ10-2596H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human KCNJ10(165-379aa) fused with His/SUMO tag at N-terminal was expressed in E. coli.
Species	Human
Source	E.coli
ProteinLength	165-379aa
Description	May be responsible for potassium buffering action of glial cells in the brain. Inward rectifier potassium channels are characterized by a greater tendency to allow potassium to flow into the cell rather than out of it. Their voltage dependence is regulated by the concentration of Extracellular domain potassium; as external potassium is raised, the voltage range of the channel opening shifts to more positive voltages. The inward rectification is mainly due to the blockage of outward current by internal magnesium. Can be blocked by Extracellular domain barium and cesium .
Form	Tris-based buffer, 50% glycerol
Molecular Mass	39.8kDa
AA Sequence	FLAKIARPKKRAETIRFSQHAVVASHNGKPCLMIRVANMRKSLLIGCQVTGKLLQTHQ TKEGENIRLNQVNVTFQVDTASDSPFLILPLTFYHVVDETSPLKDLPLRSGEGDFELV LILSGTVESTSATCQVRTSYLPEEILWGYEFTPAISLSASGKYIADFSLFDQVVKVASP SGLRDSTVRYGDPEKLKLEESLREQAEKEGSALSVRISNV

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

Purity	Greater than 90% as determined by SDS-PAGE.
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4 centigrade for up to one week.
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20 centigrade/-80 centigrade. The shelf life of lyophilized form is 12 months at -20 centigrade/-80 centigrade.

GENE INFORMATION

Gene Name	KCNJ10 potassium inwardly-rectifying channel, subfamily J, member 10 [Homo sapiens]
Official Symbol	KCNJ10
Synonyms	KCNJ10; potassium inwardly-rectifying channel, subfamily J, member 10; ATP-sensitive inward rectifier potassium channel 10; Kir1.2; Kir4.1; inward rectifier K+ channel KIR1.2; inward rectifier K(+) channel Kir1.2; ATP-dependent inwardly rectifying potassium channel Kir4.1; potassium channel, inwardly rectifying subfamily J member 10; glial ATP-dependent inwardly rectifying potassium channel KIR4.1; KIR1.2; KIR4.1; SESAME; BIRK-10; KCNJ13-PEN;
Gene ID	3766
mRNA Refseq	NM_002241
Protein Refseq	NP_002232
MIM	602208

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

UniProt ID	P78508
Chromosome Location	1q23.2
Pathway	Activation of G protein gated Potassium channels, organism-specific biosystem; Activation of GABAB receptors, organism-specific biosystem; G protein gated Potassium channels, organism-specific biosystem; GABA B receptor activation, organism-specific biosystem; GABA receptor activation, organism-specific biosystem; Gastric acid secretion, organism-specific biosystem; Gastric acid secretion, conserved biosystem;
Function	ATP binding; ATP-activated inward rectifier potassium channel activity; identical protein binding; nucleotide binding; potassium channel activity; protein binding; voltage-gated ion channel activity;

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA