



Recombinant Human Voltage-gated potassium channel subunit beta-1 (KCNA1)

Product Code	CSB-YP617931HU
Abbreviation	KCNA1
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°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	Q14722
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	>85% (SDS-PAGE)
Sequence	MLAARTGAAG SQISEENTKL RRQSGFSVAG KDKSPKKASE NAKDSSLSPS GESQLRARQL ALLREVEMNW YLKLCDLSSE HTTPCTTGMP HRNLGKSGLR VSCLGLGTWV TFGGQISDEV AERLMTIAYE SGVNLFDTAE VYAAGKAEVI LGSIIKKKGW RRSSLVITTK LYWGGKAETE RGLSRKHIII GLKGSLLQRLQ LEYVDVVFAN RPDSTNPMEE IVRAMTHVIN QGMAMYWGTS RWSAMEIMEA YSVARQFNMI PPVCEQAEYH LFRQEKVEVQ LPELYHKIGV GAMTWSPLAC GIISGKYGNG VPESRSLK CYQWLKERIV SEEGRKQNK LKDLSPIAER LGCTLPQLAV AWCLRNEGVS SVLLGSSTPE QLIENLGAIQ VLPKMTSHVV NEIDNILRNK PYSKKDYRS
Source	Yeast
Target Names	KCNA1
Protein Names	Recommended name: Voltage-gated potassium channel subunit beta-1 Alternative name(s): K(+) channel subunit beta-1 Kv-beta-1
Expression Region	1-419
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	Tag type will be determined during the manufacturing process.
Protein Length	full length protein
Target Details	Potassium channels represent the most complex class of voltage-gated ion channels from both functional and structural standpoints. Their diverse functions include regulating neurotransmitter release, heart rate, insulin secretion, neuronal excitability, epithelial electrolyte transport, smooth muscle contraction, and cell volume. Four sequence-related potassium channel genes - shaker, shaw, shab, and shal - have been identified in Drosophila, and each has been shown to have human homolog(s). This gene encodes a member of the potassium channel, voltage-gated, shaker-related subfamily. This member includes three distinct isoforms which are encoded by three alternatively spliced



transcript variants of this gene. These three isoforms are beta subunits, which form heteromultimeric complex with alpha subunits and modulate the activity of the pore-forming alpha subunits.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

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°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.