

**PRODUCT INFORMATION**

|   |   |
|---|---|
| <b>Tag</b>                              | C-Flag&Strep Tag  |
| <b>Target</b>                           | KCAB1   |
| <b>Synonyms</b>                         | AKR6A3, KCNA1B, KV-BETA-1, Kvb1.3, hKvBeta3, hKvb3  |
| <b>Description</b>                      | Human KCAB1-Strep full length protein-synthetic nanodisc  |
| <b>Delivery</b>                         | 6~8weeks  |
| <b>Uniprot ID</b>                       | Q14722  |
| <b>Expression Host</b>                  | HEK293  |
| <b>Protein Families</b>                 | Ion Channels: Other   |
| <b>Protein Pathways</b>                 | N/A   |
| <b>Molecular Weight</b>                 | The human full length KCAB1-Strep protein has a MW of 46.6 kDa  |
| <b>Formulation &amp; Reconstitution</b> | Lyophilized from nanodisc solubilization buffer (20 mM Tris-HCl, 150 mM NaCl, pH 8.0). Normally 5% - 8% trehalose is added as protectants before lyophilization. Please see Certificate of Analysis for specific instructions. Do not use solvents with a pH below 6.5 or those containing high concentrations of divalent metal ions (greater than 5 mM) in subsequent experiments. Store at -20°C to -80°C for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at -80°C (Avoid repeated freezing and thawing). Lyophilized proteins are shipped at ambient temperature.  |
| <b>Storage &amp; Shipping</b>           |   |
| <b>Background</b>                       | 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 distinct isoforms which are encoded by alternatively spliced transcript variants of this gene. Some of these isoforms are beta subunits, which form heteromultimeric complexes with alpha subunits and modulate the activity of the pore-forming alpha subunits. [provided by RefSeq, Apr 2015] |
| <b>Usage</b>                            | Research use only   |
| <b>Conjugate</b>                        | Unconjugated  |

