Recombinant BACD3 protein (His tag)

Catalog Number	543602
Synonyms	hBACURD3; BTB/POZ domain-containing protein KCTD10; Potassium channel tetramerization domain-containing protein 10
Species	Human
Expression System	E. coli
Accession	Q9H3F6
Molecular Weight	Predictes a molecular mass of 37.09 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 40 kDa band.

Product Information

Sequence Region	1-313
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>87%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 1-313 aa (Q9H3F6) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Recombinant human BACURD3 (KCTD10) fragment (residues 1-313) encompassing the full BTB domain. This high-purity protein is an essential tool for investigating the molecular mechanisms of ubiquitin-mediated proteasomal degradation and BTB domain functionality in cellular regulation. BTB/POZ domain-containing adapter for CUL3-mediated RhoA degradation protein 3 (BACURD3), encoded by the KCTD10 gene, functions as a substrate-specific adapter in the BCR (BTB-CUL3-RBX1) E3 ubiquitin ligase complex. This complex facilitates the ubiquitination of target proteins, marking them for proteasomal degradation—a critical process in maintaining cellular homeostasis and regulating protein turnover. BACURD3 is primarily localized to the nucleus, where it participates in ubiquitination pathways that influence key cellular processes. The recombinant fragment (1-313) retains the complete BTB domain, enabling focused studies on adapter function and protein-protein interactions within ubiquitin ligase complexes.