Recombinant HEY2 protein (His tag)

Catalog Number	539147
Synonyms	Cardiovascular helix-loop-helix factor 1; hCHF1; Class B basic helix-loop-helix protein 32; bHLHb32; HES-related repressor protein 2; Hairy and enhancer of split-related protein 2; HESR-2; Hairy-related transcription factor 2; HRT-2; hHRT2; Protein gridlock homolog
Species	Human
Expression System	E. coli
Accession	Q9UBP5
Molecular Weight	Predictes a molecular mass of 16.26 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 16 kDa band.

Product Information

Sequence Region	42-171
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, 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 42-171 aa (Q9UBP5) 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 HEY2 (Hairy/enhancer-of-split related with YRPW motif protein 2) fragment (aa 42-171), a 130-amino acid protein derived from Homo sapiens, designed for studying Notch signaling and transcriptional repression. This fragment fully encompasses the bHLH and Orange functional domains, making it an ideal tool for domain-specific functional assays and cardiovascular research. HEY2 functions as a downstream effector of Notch signaling and is implicated in cardiovascular development. It acts as a transcriptional repressor, preferentially binding to the canonical E box sequence 5'-CACGTG-3', and represses transcription by cardiac activators GATA4 and GATA6. The full-length protein is localized to the nucleus, consistent with its role in gene regulation. The provided fragment retains key functional domains essential for DNA binding and protein interactions, enabling focused investigation of HEY2's mechanistic roles in development and disease pathways.