Recombinant BHE23 protein (His tag)

Catalog Number	550458
Synonyms	bHLHe23; Class B basic helix-loop-helix protein 4; bHLHb4
Species	Human
Expression System	E. coli
Accession	Q8NDY6
Molecular Weight	Predictes a molecular mass of 10.53 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 11 kDa band.

Product Information

Sequence Region	95-171
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, 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 95-171 aa (Q8NDY6) 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 Class E Basic Helix-Loop-Helix Protein 23 (bHLHe23) Fragment (aa 95-171). This high-purity protein fragment encompasses the complete bHLH domain, offering researchers a targeted tool for investigating transcriptional repression mechanisms and roles in pancreatic, neuronal, and retinal cell differentiation. The full-length Class E Basic Helix-Loop-Helix Protein 23 (bHLHe23), also known as Class B Basic Helix-Loop-Helix Protein 4 (bHLHb4), functions as a transcriptional repressor encoded by the BHLHE23 gene in humans. It is implicated in modulating gene expression essential for the differentiation and maintenance of pancreatic and neuronal cell types, with evidence suggesting a critical role in rod bipolar cell maturation in the retina. The protein localizes to the nucleus, consistent with its function in transcriptional regulation. This recombinant fragment provides a focused approach to study the specific contributions of its functional domains.