Recombinant MLXIP protein (His tag)

Catalog Number	545978
Synonyms	Class E basic helix-loop-helix protein 36; bHLHe36; Transcriptional activator MondoA
Species	Human
Expression System	E. coli
Accession	Q9HAP2
Molecular Weight	Predictes a molecular mass of 25.49 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 25 kDa band.

Product Information

Sequence Region	714-919
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 714-919 aa (Q9HAP2) 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 MLX-interacting protein (MondoA) fragment (amino acids 714-919), encompassing the essential basic helix-loop-helix (bHLH) domain. This high-purity protein fragment serves as an ideal tool for studying the DNA-binding and transcriptional activation functions of this key metabolic regulator. MLX-interacting protein (MondoA) functions as a transcriptional activator that binds DNA as a heterodimer with MLX, specifically recognizing the canonical E box sequence 5'-CACGTG-3'. This protein plays a critical role in glucose-responsive gene regulation and activates transcription of glycolytic target genes, positioning it as a central regulator of cellular metabolism. The full-length protein exhibits dynamic subcellular localization, predominantly residing in the cytoplasm but shuttling between the cytoplasm and nucleus when associated with MLX. Additionally, it associates with the outer mitochondrial membrane and may shuttle between this membrane and the nucleus, reflecting its multifaceted role in cellular energy sensing and metabolic regulation.