Recombinant DMTF1 protein (His tag)

Catalog Number	539259
Synonyms	hDMTF1; Cyclin-D-interacting Myb-like protein 1; hDMP1
Species	Human
Expression System	E. coli
Accession	Q9Y222
Molecular Weight	Predictes a molecular mass of 34.72 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 38 kDa band.

Product Information

Sequence Region	131-412
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 131-412 aa (Q9Y222) 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 Cyclin-D-binding Myb-like transcription factor 1 (hDMTF1) fragment (amino acids 131-412), encompassing the complete Myb-like 1, HTH myb-type, and Myb-like 2 domains. This high-purity protein is ideal for investigating domain-specific transcriptional regulation and interactions in Ras-Raf signaling pathways. Cyclin-D-binding Myb-like transcription factor 1 (hDMTF1) is a transcriptional activator that plays a critical role in cell cycle regulation by activating the CDKN2A/ARF locus in response to Ras-Raf signaling, thereby promoting p53/TP53-dependent growth arrest. It binds to the consensus DNA sequence 5'-CCCG[GT]ATGT-3' and exhibits isoform-specific functions, with isoform 1 potentially cooperating with MYB to activate transcription of the ANPEP gene, while isoform 2 may antagonize this activity. The protein is localized to the nucleus, where it executes its transcriptional regulatory functions. This recombinant fragment provides a targeted tool for studying the structural and functional properties of its key DNA-binding and regulatory domains.