

Recombinant Human HLF Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP50412

Size: 10ug, 100ug

Protein Name: Transcription factor HLF (Hepatic leukemia factor)

Synonym: HLF

UniProt ID: Q16534

UniProt Link: www.uniprot.org/uniprotkb/Q16534/entry

Species Source: Human

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 295 AA

Molecular Weight: 33 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MEKMSRPLPLNPTFIPPPYGVLRSLLNPLKLPLHHEDAFSKDKDKEKKLDDESNSPTVPQSAFLGP
TLWDKTLPYDGDTFQLEYMDLEEFLENGIPSPSQHDHSPHPPGLQPASSAAPSVM DLSSRASAP
LHPGIPSPNCMQSPIRPGQLLPANRNTSPIDPDTIQVPVGYEPDPADLALSSIPGQEMFDPRKRKFS
EEELKPQPMIKKARKVFIPDDLKDDKYWARRRKNNMAAKRSRDARRLKENQIAIRASFLEKENSALR
QEVADLRKELGKCKNILAKYEARHGPL

3. Buffer Composition

Liquid format: PBS-based buffer containing 50% glycerol. Glycerol concentration can be customized upon customer request; please state special requirements when placing your order.

Lyophilized format: Buffer before lyophilization is PBS supplemented with 6% trehalose.

4. Storage Conditions

Upon receipt, store the product at -20 °C or -80 °C. Aliquot the product for on-demand use to preserve protein activity and prevent denaturation and inactivation caused by repeated freeze-thaw cycles.

5. Product Description

This product is recombinant Transcription factor HLF (Hepatic leukemia factor) produced using the HEK293T eukaryotic cell expression system. It is suitable for in-vitro functional assays, protein-protein interaction studies, antibody preparation and other biomedical research applications.

Protein Function: Transcription factor which selectively binds with high affinity to the consensus sequence 5'-GTTACGTAAT-3' and to closely related sites (PubMed:8065331, PubMed:8164688, PubMed:8639829). Has transcriptional activator activity (PubMed:10073576, PubMed:8065331, PubMed:8164688, PubMed:8639829). Also has transcriptional repressor activity (By similarity). Binds to multiple sites in the promoter regions of coagulation factors F8 and F9 and activates transcription; transactivation activity is enhanced by formation of a heterodimer with DBP (PubMed:10073576). Binds to the promoter region of IRF2 and activates transcription (By similarity). Maintains quiescence of hematopoietic stem cells under steady-state conditions and protects the stem cell pool from toxic insults (By similarity). Regulates the tissue residency and proinflammatory function of CD4⁺ tissue-resident memory T (TRM) cells (By similarity). Down-regulates the expression of genes involved in promoting tissue egress of CD4⁺ TRM cells including S1PR1, KLF2 and TCF7 while up-regulating expression of tissue retention molecules such as CD69 (By similarity). Also up-regulates BHLHE40 expression, promoting proinflammatory cytokine production (By similarity).

Subcellular Localization: Nucleus .

6. Notes

- Avoid repeated freeze-thaw cycles to maintain protein stability and biological activity.
- Please specify special buffer-composition requirements at the time of order placement.
- For research use only. Not intended for clinical diagnosis, therapeutic use or commercial manufacturing.