

Recombinant Mouse KLF4 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP51619

Size: 10ug, 100ug

Protein Name: Krueppel-like factor 4 (Epithelial zinc finger protein EZF) (Gut-enriched krueppel-like factor)

Synonym: Klf4, Ezf, Gklf, Zie

UniProt ID: Q60793

UniProt Link: www.uniprot.org/uniprotkb/Q60793/entry

Species Source: Mouse

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 483 AA

Molecular Weight: 52 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MRQPPGESDMAVSDALLPSFSTFASGPAGREKTLRPAGAPTNRWREELSHMKRLPPLPGRPYDLA
ATVATDLESGGAGAACSSNNPALLARRETEEFNDLLDLDFILSNLTHQESVAATVTTSASASSSSSP
ASSGPASAPSTCSFSYPIRAGGDPGVAASNTGGGLLYSRESAPPPTAPFNLADINDVSPSGGFVAEL
LRPELDPVYIPPPQPPGGGLMGKVLKASLTTPGSEYSSPSVISVSKGSPDGSHPVVVAPYSGG
PPRMCPIKQEAVPSCTVSRSLAHL SAGPQLSNGHRPNTHDFPLGRQLPTRTTPTLSPEELLNSRD
CHPGLPLPPGFHPPHGPNYPPFLPDQM QSQVPSLHYQELMPPGSCLPEEPKPKRGRRSWPRKRT
ATHTCDYAGCGKTYTKSSHLKAHLRHTTGEKPYHCDWDGCGWKFARSDELTRHYRKHTGHRPFQ
CQKCDRAFSRSDHLALHMKRHF

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 Krueppel-like factor 4 (Epithelial zinc finger protein EZF) (Gut-enriched krueppel-like 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; can act both as activator and as repressor. Binds the 5'-CACCC-3' core sequence (PubMed:10431239, PubMed:10556311, PubMed:15358627, PubMed:16954384, PubMed:17060454, PubMed:19816951, PubMed:20071344, PubMed:29593216, PubMed:39986490). Binds to the promoter region of its own gene and can activate its own transcription (PubMed:10431239, PubMed:10556311, PubMed:15358627, PubMed:16954384, PubMed:17060454, PubMed:19816951, PubMed:20071344, PubMed:29593216). Regulates the expression of key transcription factors during embryonic development (PubMed:10431239, PubMed:10556311, PubMed:15358627, PubMed:16954384, PubMed:17060454, PubMed:19816951, PubMed:20071344, PubMed:29593216). Plays an important role in maintaining embryonic stem cells, and in preventing their differentiation (PubMed:10431239, PubMed:10556311, PubMed:15358627, PubMed:16954384, PubMed:17060454, PubMed:19816951, PubMed:20071344, PubMed:29593216). Required for establishing the barrier function of the skin and for postnatal maturation and maintenance of the ocular surface. Involved in the differentiation of epithelial cells and may also function in skeletal and kidney development. Contributes to the down-regulation of p53/TP53 transcription (By similarity).

Subcellular Localization: Nucleus . Cytoplasm .

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.