

Recombinant Mouse IL16 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP51171

Size: 10ug, 100ug

Protein Name: Pro-interleukin-16 [Cleaved into: Interleukin-16 (IL-16) (Lymphocyte chemoattractant factor) (LCF)]

Synonym: Il16

UniProt ID: O54824

UniProt Link: www.uniprot.org/uniprotkb/O54824/entry

Species Source: Mouse

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 1322 AA

Molecular Weight: 141 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MEPHGHSGKSRKSTKFRSISRSLILCNAKTSDDGSSPDEKYPDPFETSLCQGKEGFFHSSMQLADT
FEAGLSNIPDLALASDSAQLAAAGSDRGKHCRKMFFMKESSSTSSKEKSGKPEAQSSSFLFPKACH
QRTRSNSTSVNPYSAGEIDFPMTKKSAAPTDRQPYSLCSNRKSLSQQLDYPILGTARPTRSLSTAQL
GQLSGGLQASVISNIVLMKGQAKGLGFSIVGGKDSIYGPIGIYVKSIFAGGAAAADGRLQEGDEILELN
GESMAGLTHQDALQKFKQAKKGLLTLTVRTRLTPPSLCSHLSPPLCRSLSSSTCGAQDSSPFSLES
PASPASTAKPNYRIMVEVSLKKEAGVGLGIGLCSIPYFQCISGIFVHTLSPGSVAHLDGRLRCGDEIVE
INDSPVHCLTLNEVYILSHCDPGPVPIIVSRHPDPQVSEQQLKEAVAQAVEGVKFGKDRHQWSLEG
VKRLESSWHGRPTLEKEREKHSAPPHRAQKIMVRSSSDSSYMSGSPGGSPCSAGAEPQPSERE
GSTHSPSLSPGEEQEPCPGVPSRPQQESPLPESLERESHPLRLKKSFEILVRKPTSSPKPPPRK
YFKNDSSEPQKKLEEKEKVTDPSGHTLPTCSQETRELLPLLLQEDTAGRAPCTAACCPGPAASTQTSS
STEGESRRSASPETPASPGKHPLLRQARMDYSFDITAEDPWVRISDCIKNLFSPIMSENHSHTPLQ
PNTSLGEEDGTQGCPEGGLSKMDAANGAPRVYKSADGSTVKKGPPVAPKPAWFRQSLKGLRNRA
PDPRRPPEVASAIQPTPVSRDPPGPQPQASSIRQRISSFENFGSSQLPDRGVQRLSLQPSSGETTK
FPGKQDGGFRFSGLLGQGATVTAKHRQTEVESMSTTFPNSSEVRDPGLPESPPPGQRPSTKALSPD
PLLRLTTQSEDGTQGPGLKMPSQRARSFPLTRTQSCETKLLDEKASKLYSISSQLSSAVMKSLLCLPS
SVSCGQITCIPKERVSPKSPCNNSSAAEGFGEAMASDTGFSNLSELREYSEGLTEPGETEDRNNHC
SSQAGQSVISLLSAEELEKLEEVRVLDEATLKQLDSIHVTILHKEEGAGLGFSLAGGADLENKVITVHR
VFPNGLASQEGTIQKGNEVLSINGKSLKGATHNDALAILRQARDPRQAVIVTRRTTVEATHDLNSSTD



SAASASAASDISVESKEATVCTVTLEKTSAGLGFSLEGGKGS LHGDKPLTINRIFKGTEQ GEMVQPG
DEILQLAGTAVQGLTRFEAWNVIKALPDGPVTIVIRRTSLQCKQTTASADS

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 Pro-interleukin-16 [Cleaved into: Interleukin-16 (IL-16) (Lymphocyte chemoattractant factor) (LCF)] 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: Interleukin-16 stimulates a migratory response in CD4+ lymphocytes, monocytes, and eosinophils. Primes CD4+ T-cells for IL-2 and IL-15 responsiveness. Also induces T-lymphocyte expression of interleukin 2 receptor. Ligand for CD4.; Isoform 1 may act as a scaffolding protein that anchors ion channels in the membrane.; Isoform 2 is involved in cell cycle progression in T-cells. Appears to be involved in transcriptional regulation of SKP2 and is probably part of a transcriptional repression complex on the core promoter of the SKP2 gene. May act as a scaffold for GABPB1 (the DNA-binding subunit the GABP transcription factor complex) and HDAC3 thus maintaining transcriptional repression and blocking cell cycle progression in resting T-cells.

Subcellular Localization: Secreted .; [Isoform 1]: Cytoplasm . Note=Colocalizes with GRIN2C in neuronal cell bodies and neurites.; [Isoform 2]: Cytoplasm. 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.