

Recombinant Human IRF5 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP50569

Size: 10ug, 100ug

Protein Name: Interferon regulatory factor 5 (IRF-5)

Synonym: IRF5

UniProt ID: Q13568

UniProt Link: www.uniprot.org/uniprotkb/Q13568/entry

Species Source: Human

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 498 AA

Molecular Weight: 56 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MNQSIPVAPTPPRRVRLKPWLVAQVNSCQYPGLQWVNGEKKLFCIPWRHATRHGPSQDGDNTIFK
AWAKETGKYTEGVDEADPAKWKANLRCALNKS RDFRLIYDGPRDMPPQPYKIYEVCSNGPAPTDS
QPPEDYSFGAGEEEEEEEEEELQRMLPSLSLTEDVKWPPTLQPPTLRPPTLQPPTLQPPVVLGPPAPD
PSPLAPPPGNPAGFRELLSEVLEPGPLPASLPPAGEQLLPDLLISPHMLPLTDLEIKFQYRGRPPRAL
TISNPHGCR LFYSQLEATQEQVELFGPISLEQVRFPSPEDIPSDKQRFYTNQLLDVLDRLILQLQGQ
DLYAIRLCQCKVFWSGPCASAH DSCPNPIQREVTKLFSLEHFLNELILFQKGQTNTPPPFEIFFCFG
EEWPDRKPREKKLITVQVVPVAARLLLEMFSGELSW SADSIRLQISNPDLKDRMVEQFKELHHIWQS
QQRLQPVAQAPPGAGLGVGQGPWPMHPAGMQ

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 Interferon regulatory factor 5 (IRF-5) 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 that plays a critical role in innate immunity by activating expression of type I interferon (IFN) IFNA and IFNB and inflammatory cytokines downstream of endolysosomal toll-like receptors TLR7, TLR8 and TLR9 (PubMed:11303025, PubMed:15695821, PubMed:22412986, PubMed:25326418, PubMed:32433612, PubMed:40639948). Regulates the transcription of type I IFN genes (IFN-alpha and IFN-beta) and IFN-stimulated genes (ISG) by binding to an interferon-stimulated response element (ISRE) in their promoters (By similarity). Can efficiently activate both the IFN-beta (IFNB) and the IFN-alpha (IFNA) genes and mediate their induction downstream of the TLR-activated, MyD88-dependent pathway (By similarity). Key transcription factor regulating the IFN response during SARS-CoV-2 infection (PubMed:33440148).

Subcellular Localization: Cytoplasm . Nucleus . Note=Shuttles between the nucleus and the cytoplasm: upon activation by the TLR adapter MYD88 and subsequent phosphorylation, translocates to the 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.