

Recombinant Mouse IRF5 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP51478

Size: 10ug, 100ug

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

Synonym: Irf5

UniProt ID: P56477

UniProt Link: www.uniprot.org/uniprotkb/P56477/entry

Species Source: Mouse

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 497 AA

Molecular Weight: 56 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MNHSAPGIPPPRRVRLKPWLVAQVNSCQYPGLQWVNGEKKLFYIPWRHATRHGPSQDGDNTIFK
AWAKETGKYTEGVDEADPAKWKANLRCALNKS RDFQLFYDGPRDMPPQPYKIYEVCSNGPAPTES
QPTDDYVLGEEEEEEEEELQRMLPGLSITEPALGPPNAPYSLPKEDTKWPPALQPPVGLGPPVPD
PNLLAPPSGNPAGFRQLLEPVLEPGPLASSQPPTPELLPDLLISPHMLPLTDLEIKFYRGRAPRTLTI
SNPQGCRLFYSQLQLEATQEQVELFGPVTLEQVRFSPEDIPSDKQRFYTNQLLDVLDRLILQLQGQD
LYAIRLCQCKVFWSGPCALAHGSCPNPIQREVKTCLFSLEQFLNELILFQKGQTNTPPPFEIFFCFGE
EWPDVKPREKKLITVQVVPVAARLLLEMFSGELSWSADSIRLQISNPDLKDHMVEQFKELHHLWQSQ
QQLQPMVQAPPVAGLDASQGPWPMHPVGMQ

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:15665823). 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 (PubMed:15665823). 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 (PubMed:15665823).

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.