

Recombinant Mouse INAR1 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP51386

Size: 10ug, 100ug

Protein Name: Interferon alpha/beta receptor 1 (IFN-R-1) (IFN-alpha/beta receptor 1) (Type I interferon receptor 1)

Synonym: Ifnar1, Ifar, Ifnar

UniProt ID: P33896

UniProt Link: www.uniprot.org/uniprotkb/P33896/entry

Species Source: Mouse

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 590 AA

Molecular Weight: 66 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MLAVVGAAALVLVAGAPWVLPSAAGGENLKPPENIDVYIIDDNYTLKWSSHGESMGSVTFSAEYRTK
DEAKWLKVPECQHHTTTTKCEFSLLDTNVIKTQFRVRAEEGNSTSSWNEVDPFIPFYTAHMSPEVR
LEAEDKAILVHISPPGQDGNMWALEKPSFSYTIWQKSSSDKKTINSTYYVEKIPPELLPETTYCLEVK
AIHPSLKHSNSTVQCISTTVANKMPVPGNLQVDAQGKSYVLKWDYIASADVLFRQWLPGYSSKSS
SGSRSDKWKPIPTCANVQTTHCVFSQDTVYTGTFVLHVQASEGNHTSFWSSEKFIDSQKHILPPPPV
ITVTAMSDTLLVYVNCQDSTCDGLNYEIIFWENTSNTKISMEKDGPEFTLKNLQPLTVYCVQARVLF
ALLNKTSNFSEKLCEKTRPGSFSTIWIITGLGVVFFSVMVLYALRSVWKYLCHVCFPLKPPRSIDFF
SEPPSKNLVLLTAAEHTERCFIIENTDTVAVEVKHAPEEDLRKYSSQTSQDSGNYSNEEEESVGTES
GQAVLSKAPCGGPCSVSPPGTLEDGTCFLGNEKYLQSPALRTEPALLC

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 alpha/beta receptor 1 (IFN-R-1) (IFN-alpha/beta receptor 1) (Type I interferon receptor 1) 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: Together with IFNAR2, forms the heterodimeric receptor for type I interferons (including interferons alpha, beta, epsilon, omega and kappa) (PubMed:14532120, PubMed:1533935, PubMed:24075985). Type I interferon binding activates the JAK-STAT signaling cascade, and triggers tyrosine phosphorylation of a number of proteins including JAKs, TYK2, STAT proteins and the IFNR alpha- and beta-subunits themselves (By similarity). STAT proteins are then phosphorylated by the JAKs, promoting their translocation into the nucleus to regulate expression of interferon-regulated genes (By similarity). Can also act independently of IFNAR2: form an active IFNB1 receptor by itself and activate a signaling cascade that does not involve activation of the JAK-STAT pathway (PubMed:23872679).

Subcellular Localization: Cell membrane ; Single-pass type I membrane protein . Late endosome . Lysosome . Note=Interferon binding triggers internalization of the receptor from the cell membrane into endosomes and then into lysosomes.

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.