

Recombinant Human INAR2 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP50552

Size: 10ug, 100ug

Protein Name: Interferon alpha/beta receptor 2 (IFN-R-2) (IFN-alpha binding protein) (IFN-alpha/beta receptor 2) (Interferon alpha binding protein) (Type I interferon receptor 2)

Synonym: IFNAR2, IFNABR, IFNARB

UniProt ID: P48551

UniProt Link: www.uniprot.org/uniprotkb/P48551/entry

Species Source: Human

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 515 AA

Molecular Weight: 58 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MLLSQNAFIFRSLNLVLMVYISLVFGISYDSPDYTDESCTFKISLRNFRSILSWELKNHSIVPTHYTLTYT
IMSKPEDLKVVKNCANTTRSFCDLTDEWRSTHEAYVTVLEGFSGNNTLFCSHNFWLAIDMSFEPPE
FEIVGFTNHINVMVKFPSIVEEELQFDLSLVIEEQSEGIVKKHKPEIKGNMSGNFTYIIDKLIPNTNYCVS
VYLEHSDEQAVIKSPLKCTLLPPGQSESAESAIGIGGIITVFLIALVLTSTIVTLKWIGYICLRNSLPKVLN
FHNFLAWPFPNLPLEAMDMVEVIYINRKKKVDYNYDDESDDTEAAPRTSGGGYTMHGLTVRPL
GQASATSTESQLIDPESEEEPDLPEDVELPTMPKDSPPQLELLSGPCERRKSPLQDPFPEEDYSST
EGSGGRITFNVDLNSVFLRVLDDDESDDLEAPLMLSSHLEEMVDPEDPDNVQSNHLLASGEGTQPT
FPSPSSEGLWSEDAPSDQSDTSESDVDLGDGYIMR

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 2 (IFN-R-2) (IFN-alpha binding protein) (IFN-alpha/beta receptor 2) (Interferon alpha binding protein) (Type I interferon receptor 2) 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 IFNAR1, forms the heterodimeric receptor for type I interferons (including interferons alpha, beta, epsilon, omega and kappa) (PubMed:10049744, PubMed:10556041, PubMed:21854986, PubMed:26424569, PubMed:28165510, PubMed:32972995, PubMed:7665574, PubMed:7759950, PubMed:8181059, PubMed:8798579, PubMed:8969169). Type I interferon binding activates the JAK-STAT signaling cascade, resulting in transcriptional activation or repression of interferon-regulated genes that encode the effectors of the interferon response (PubMed:10049744, PubMed:17517919, PubMed:21854986, PubMed:26424569, PubMed:28165510, PubMed:32972995, PubMed:7665574, PubMed:7759950, PubMed:8181059, PubMed:8798579, PubMed:8969169). Mechanistically, type I interferon-binding brings the IFNAR1 and IFNAR2 subunits into close proximity with one another, driving their associated Janus kinases (JAKs) (TYK2 bound to IFNAR1 and JAK1 bound to IFNAR2) to cross-phosphorylate one another (PubMed:10556041, PubMed:11682488, PubMed:12105218, PubMed:21854986, PubMed:32972995). The activated kinases phosphorylate specific tyrosine residues on the intracellular domains of IFNAR1 and IFNAR2, forming docking sites for the STAT transcription factors (STAT1, STAT2 and STAT3) (PubMed:11682488, PubMed:12105218, PubMed:21854986, PubMed:32972995). STAT proteins are then phosphorylated by the JAKs, promoting their translocation into the nucleus to regulate expression of interferon-regulated genes (PubMed:12105218, PubMed:28165510, PubMed:9121453).; [Isoform 3]: Potent inhibitor of type I IFN receptor activity.

Subcellular Localization: [Isoform 1]: Cell membrane ; Single-pass type I membrane protein .; [Isoform 2]: Cell membrane ; Single-pass type I membrane protein .; [Isoform 3]: Secreted .

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.