

Recombinant Mouse INAR2 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP51159

Size: 10ug, 100ug

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

Synonym: Ifnar2

UniProt ID: O35664

UniProt Link: www.uniprot.org/uniprotkb/O35664/entry

Species Source: Mouse

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 513 AA

Molecular Weight: 57 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MRSRCTVSAVGLLSLCLVVSASLETITPSAFDGYDPDEPCTINITIRNSRLILSWELNKGPPANYTLW
YTVMSKDENLTKVKNCSDDTKSSCDVTDKWLEGMESYVVAIVIVHRGDLTVCRCSYIVPANAPLEP
PEFEIVGFTDHNVTMEFPPVTSKIIQEKMKTTTPFVIKEQIGDSVRKKHEPKVNNVTGNFTFVLRDLLPK
TNYCVSLYFDDDDPAIKSPLKCIVLQPGQESGLSESAIVGITTSLVVMVFVSTIVMLKRIGYICLDNLP
NVLNFRHFLTWIIPERSPSEAIRLEIIPNTNKKRLWNYDYEDGSDSDSEEVPTASVTGYTMHGLTGKP
LQQTSDTSASPEDPLHEEDSGAEESDEAGAGAGAEPELPTTEAGAGPSEDPTGPYERRKSVLEDSFP
REDNSSMDEPGDNIIFNVNLNSVFLRVLHDEDASETLSLEEDTILLDEGPQRTESDLRIAGGDRTQPP
LPSLPSQDLWTEGDSSEKSDTSDSDADVGDGYIMR

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/beta receptor 2) (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). 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. 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. 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). STAT proteins are then phosphorylated by the JAKs, promoting their translocation into the nucleus to regulate expression of interferon-regulated genes.; [Isoform 2]: May be potent inhibitors of type I IFN receptor activity.; [Isoform 3]: May be potent inhibitors of type I IFN receptor activity.

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