

Recombinant Human IFNAR2/IFNABR Protein (His Tag)

Catalog No. PKSH031651

Note: Centrifuge before opening to ensure complete recovery of vial contents.

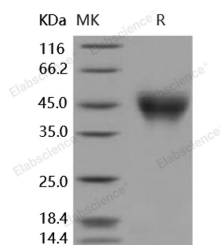
Description

Synonyms	IFN-alpha-REC;IFN-R;IFNABR;IFNARB
Species	Human
Expression Host	HEK293 Cells
Sequence	Met 1-Lys 243
Accession	NP_997468.1
Calculated Molecular Weight	26.2 kDa
Observed molecular weight	45 kDa
Tag	C-His
Bioactivity	Measured by its ability to inhibit rh IFN β mediated protection of WISH Human amnion cells infected with vesicular stomatitis virus (VSV) to viral lysis. The EC50 for this effect is typically 1-4 μ g/mL.

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per μ g of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS, pH 7.4 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 95 % as determined by reducing SDS-PAGE.

Background

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Interferon-alpha/beta receptor beta chain (IFNAR2) is a type I membrane protein that forms one of the two chains of a receptor for interferons alpha and beta. Binding and activation of the receptor stimulates Janus protein kinases; which in turn phosphorylate several proteins; including STAT1 and STAT2. Initial cell-surface IFNAR2 expression at diagnosis assessed by flow cytometry widely distributed but showed overall significantly higher expression in CML patients when compared with normal controls. In 15 fresh patients who subsequently received IFN α therapy; IFNAR2 expression at diagnosis was significantly higher in cytogenetic good responders than in poor responders. Down-regulation of IFNAR2 expression during IFN α therapy was observed only in good responders but not in poor responders. The encoded protein also functions as an antiviral factor. IFNAR2 may associate with IFNAR1 to form the type I interferon receptor. This protein serves as a receptor for interferons alpha and beta. IFNAR2 is also involved in IFN-mediated STAT1; STAT2 and STAT3 activation. Isoform 1 and isoform 2 are directly involved in signal transduction due to their association with the TYR kinase; JAK1. Isoform 3 is a potent inhibitor of type I IFN receptor activity. Following binding of IFN α 2; IFNAR2 is internalized; but; instead of being routed towards degradation as it is when complexed to IFN β ; it recycles back to the cell surface.

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