Recombinant Human IFNAR2/IFNABR Protein (Fc Tag)

Catalog Number: PKSH031652

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

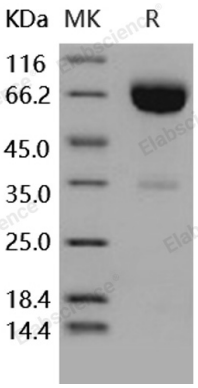
Description

Species	Human
Source	HEK293 Cells-derived Human IFNAR2/IFNABR protein Met 1-Lys 243, with an C-terminal hFc
Calculated MW	51.8 kDa
Observed MW	65-75 kDa
Accession	NP_997468.1
Bio-activity	Measured by its ability to inhibit rh IFNβ mediated protection of WISH Human amnion cells infected with vesicular stomatitis virus (VSV) to viral lysis. The EC_{50} for this effect is typically 0.2-1. 2 μg/mL.

Properties

Purity	> 90% as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per μg 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% Tween 80 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



> 90 % as determined by reducing SDS-PAGE.

Background

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 IFNα therapy; IFNAR2 expression at diagnosis was significantly higher in cytogenetic good responders than in poor responders. Down-regulation of IFNAR2 expression during IFNα 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 IFNα2; IFNAR2 is internalized; but; instead of being routed towards degradation as it is when complexed to IFNβ; it recycles back to the cell surface.

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