



# Recombinant Protein Technical Manual

## Recombinant Human IFNAR2 Protein (Fc Tag)

RPES1802

### Product Data:

**Product SKU:** RPES1802

**Size:** 10µg

**Species:** Human

**Expression host:** Human Cells

**Uniprot:** P48551

### Protein Information:

**Molecular Mass:** 51.8 kDa

**AP Molecular Mass:** 70 kDa

**Tag:** C-Fc

**Bio-activity:**

**Purity:** > 95 % as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per µg as determined by the LAL method.

**Storage:** 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 a 0.2 µm filtered solution of 20mM PB,150mM NaCl,pH7.4.

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** 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; IFNAR2; IFNABR; IFNARB

## Immunogen Information:

**Sequence:** Ile27-Lys243

## Background:

Interferon  $\alpha/\beta$  Receptor 2 (IFN- $\alpha/\beta$  R2) is a single-pass type I membrane protein which belongs to the type II cytokine receptor family. It complexes with IFN- $\alpha/\beta$  R1 to form the signaling receptor complex for the family of  $\alpha$  and  $\beta$  IFN subtypes. By alternative splicing, IFN- $\alpha/\beta$  R2 can exist as a secreted soluble protein or as a type I membrane protein. IFN- $\alpha/\beta$  R2 is the principal ligand binding subunit of the receptor. Ligand binding is stabilized by the subsequent association with IFN- $\alpha/\beta$  R1, resulting in the formation of a signaling ternary receptor complex. IFNAR2 was detected in most lymphocytes, monocytes, and granulocytes, although IFNAR2 expression was higher in the monocytes and granulocytes than in the lymphocytes. Among the lymphocyte subsets, IFNAR2 showed high expression in natural killer (NK) cells and low expression in T lymphocytes. Isoform 1 and isoform 3 of IFNAR2 are directly involved in signal transduction due to their interaction with the TYR kinase, JAK1. Isoform 1 also interacts with the transcriptional factors, STAT1 and STAT2. Both forms are potent inhibitors of type I IFN activity.