# **Elabscience Biotechnology Co., Ltd.**



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A Reliable Research Partner in Life Science and Medicine

# Recombinant Human IFNA2 Protein(Gst Tag)

Catalog Number: PDEH100538

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

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Species Human

Source E.coli-derived Human IFNA2 protein Cys24-Glu188, with an N-terminal GST

Mol\_Mass44 kDaAccessionP01563

**Bio-activity** Not validated for activity

#### **Properties**

**Purity** > 90% as determined by reducing SDS-PAGE.

**Endotoxin** < 10 EU/mg 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.

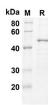
Shipping This product is provided as lyophilized powder which is shipped with ice packs.
Formulation Lyophilized from a 0.2 μm filtered solution in PBS with 5% Trehalose and 5%

Mannitol.

**Reconstitution** It is recommended that sterile water be added to the vial to prepare a stock solution of

0.5 mg/mL. Concentration is measured by UV-Vis.

#### Data



SDS-PAGE analysis of Human IFNA2 proteins, 2  $\mu$ g/lane of Recombinant Human IFNA2 proteins was resolved with an SDS-PAGE under reducing conditions, showing bands at 44

KD

## Background

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Interferon-alpha 2 (IFN alpha-2) is one of 14 subtypes with anin the IFN-alpha class of Type I Interferons. The members of the IFN-alpha class, also known as alpha leukocyte interferons, encompass a group of distinct but closely related proteins which share approximately 80% amino acid (aa) sequence identity and have a similar globular structure composed of five alpha-helices. IFN-alpha class members signal through a common cell surface receptor complex composed of IFN-alpha R2 and IFN-alpha R1 subunits. As the first highly active IFN to be cloned and produced, IFN alpha-2 has become the prototypic IFN for academic and pharmaceutical research. The mature extracellular domain (ECD) of mouse IFN alpha-2 shares 60% and 83% aa sequence identity with an human and rat, respectively. Murine IFN-alpha 2 can eliminate cardiac viral load and protect cardiomyocytes from injury in animals infected with an coxsackievirus B3 (CVB3). IFN alpha-2 derived mutants with an reduced IFNR2 binding inhibited HIV replication and mutants with an more IFNAR1 binding potentiated antiviral activity.