Elabscience®

Recombinant Human IFNA2 Protein(Gst Tag)

Catalog Number: PDEH100538

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

| Description | | |
|----------------|--|--|
| Species | Human | |
| Source | E.coli-derived Human IFNA2 protein Cys24-Glu188, with an N-terminal GST | |
| Calculated MW | ted MW 44 kDa | |
| Observed MW | 50 kDa | |
| Accession | P01563 | |
| 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 $< -20^{\circ}C$ 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

| kDa | М | R |
|----------|----|---|
| 80 60 | 11 | |
| 40 | - | - |
| 30 | | |
| 20 | - | |
| | | |

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

KD

Background

Elabscience®

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% as 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.