

Datasheet

ActiveMax® Recombinant Mouse IFN-beta / IFNB1

Catalog # IFB-H421y

For Research Use Only

Description

Source ActiveMax® Recombinant Mouse IFN-beta (IFB-H421y) is expressed from human 293 cells (HEK293). It contains AA Ile 22 - Asn 182 (Accession # P01575).

Protein Structure

IFN-beta(Ile 22 - Asn 182)
P01575

Molecular Characterization This protein carries no "tag". The protein has a calculated MW of 19.9 kDa. The protein migrates as 27-33 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin Less than 1.0 EU per µg by the LAL method.

Purity >95% as determined by SDS-PAGE.

Formulation and Storage

Formulation Lyophilized from 0.22 µm filtered solution in PBS, pH7.4. Normally trehalose is added as protectant before lyophilization.
Contact us for customized product form or formulation.

Reconstitution Please see Certificate of Analysis for specific instructions. For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage For long term storage, the product should be stored at lyophilized state at -20°C or lower. Please avoid repeated freeze-thaw cycles.
No activity loss was observed after storage at:
• 4-8°C for 12 months in lyophilized state;
• -70°C for 3 months under sterile conditions after reconstitution.

Background

Background Human type I interferons (IFNs) are a large subgroup of interferon proteins that help regulate the activity of the immune system. Interferons bind to interferon receptors. All type I IFNs bind to a specific cell surface receptor complex known as the IFN- α receptor (IFNAR) that consists of IFNAR1 and IFNAR2 chains. The IFN- β proteins are produced in large quantities by fibroblasts. They have antiviral activity that is involved mainly in innate immune response. Two types of IFN- β have been described, IFN- β 1 (IFNB1) and IFN- β 3 (IFNB3) (a gene designated IFN- β 2 is actually IL-6). IFN- β 1 is used as a treatment for multiple sclerosis as it reduces the relapse rate. Furthermore, IFN- β 1 can bind to a IFNAR1-IFNAR2 heterodimeric receptor, and can also function with IFNAR1 alone and independently of Jak-STAT pathways.

References
(1) de Weerd N.A., et al., 2013, Nat. Immunol. 14:901-907.
(2) Civitas A., et al., 1988, Eur. J. Biochem. 173:311-316.

Please contact us at TechSupport@acrobiosystems.com, if you have any questions about this product.

Datasheet

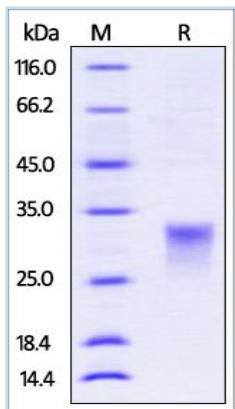
ActiveMax® Recombinant Mouse IFN-beta / IFNB1

Catalog # IFB-H421y

For Research Use Only

Assay Data

SDS-PAGE Data



ActiveMax® Recombinant Mouse IFN-beta on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.