Human IFN-beta 1a (glycosylated, HSA)

Human Interferon-β 1a, glycosylated, HSA, recombinant

Synonyms: Leukocyte interferon, B cell interferon, Type I interferon, Leukocyte IFN, B cell IFN, Type I IFN, IFNB1, IFB, IFF, IFNB, IFN-b 1a, MGC96956.

PLEASE NOTE: ALWAYS CENTRIFUGE VIAL BEFORE OPENING

Size	Order #	Lot #	Expiry Date
5 µg	1474.954.005		
20 µg	1474.954.020		
1 mg	1474.954.199		

Please enquire for bulk quantities and other vial sizes

Description

Recombinant human Interferon-beta 1a (IFN-beta 1a) derived from CHO is a 20.0 kDa protein containing 166 amino acid residues. Due to glycosylation, IFN-beta 1a has an approximate MW of 22.3 kDa based on SDS-PAGE gel and Mass Spectrometry. Proteins of this family play an important role in inducing non-specific resistance against a broad range of viral infections. They also affect cell proliferation and modulate immune responses. Produced by peripheral blood leukocytes and lymphoblastoid cells, IFN- alpha is an acid stable molecule that signals through IFN-alpha/-betaR, which is also used by IFN-beta. Both IFNs have similar anti-viral activity and regulate expression of MHC class I antigens. IFN-alpha contains four highly conserved cysteine residues which form two disulfide bonds, one of which is necessary for biological activity.

- **Biological Activity** ≥ 2.0 x 10^8 IU/mg
- **Source** CHO
- **Purity** ≥ 99 % (SDS-PAGE, RP-HPLC)
- **Endotoxin level** ≤ 0.1ng/µg (≤ 1EU/µg)
- **Stabilizer** HSA, Manitol
- **Buffer** Acetate (50mM) pH 3.8*
- **Physical state** Sterile filtered, lyophilized

Biological Activity

The biological activity of human IFN-beta was based on analysis using the WISH cell line with VSV as the challenge virus. The specific activity was determined to be ≥ 2.0 x 10^8 IU/mg.

Reconstitution

We recommend a quick spin followed by reconstitution in sterile water to a concentration of at least 100µg/ml, which can then be further diluted to other aqueous solutions.

Stability

The lyophilized protein is stable until the indicated expiry date if stored ≤ -20°C. Reconstituted IFN-beta 1a is stable for at least 3 months when stored in working aliquots with a carrier protein at -20°C. For long term storage we recommend to add at least 0.1% HSA (order number: 2835.955.xyz or 2835.958.xyz) or BSA (order number: 2835.919.xyz). Please avoid repeated freeze-thaw cycles.

Usage: For research use only. Not for use in diagnostic or therapeutic procedures. Not for human use.

*The Buffer may vary depending on the Lot #. Please contact our technical support if you have specific requirements.

ORDERING
Tel.: +49 40 43208448-0
order@active-bioscience.de
www.active-bioscience.de

TECHNICAL SUPPORT
Tel.: +49 40 43208448-11
support@active-bioscience.de

Active Bioscience GmbH
Oberaltenallee 8
D-22081 Hamburg
HRB 98170 Amtsgericht Hamburg