IFN-beta Human Chinese Hamster Ovary Cells (CHO)

Product Data Sheet

Type: Recombinant
Source: Chinese Hamster Ovary Cells (CHO)
Species: Human
Other names: Leukocyte interferon, B cell interferon, Type I interferon

Cat. No.:

RBG10181005	(5 µg)
RBG10181020	(20 µg)
RBG10181100	(100 µg)

Description

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 that form two disulfide bonds, one of which is necessary for biological activity. PeproTech's Recombinant Human IFN-beta is a 20.0 kDa protein containing 166 amino acid residues. Due to glycosylation, IFN-beta has an approximate MW of 22.3 kDa based on SDS-PAGE gel and Mass Spectrometry.

Research topic

Immune Response, Infection and Inflammation, Neural tissue markers, Oncology

Amino Acid Sequence

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MSYNLLGFLQ RSSNFQCQKL LWQLNGRLEY CLKDRMNFDI PEEIKQLQQF QKEDAALTIY EMLQNIFAIF RQDSSSTGWN
ETIVENLLAN VYHQINHLKT VLEEKLEKED FTRGKLMSSL HLKRYYGRIL HYLKAKEYSH CAWTIVRVEI LRNFYFINRL TGYLRN
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Source

Chinese Hamster Ovary Cells (CHO)

Purity

95%

Biological Activity

Assay #1:Measured by its ability to induce apoptosis in HeLa cells. The expected ED_{50} for this effect is 20-30 ng/ml.
Assay #2: Determined by its ability to stimulate the proliferation of human TF-1 cells. The expected ED_{50} is ? 0.1 ng/ml, corresponding to a specific activity of ? 1×10^{7} units/mg.

Endotoxin

Endotoxin level is <0.1 ng/µg of protein (<1EU/µg).

Reconstitution

Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 1.0 mg/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1 week. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C.

Storage, Stability/Shelf Life

-20°C

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