DATASHEET
Version 20181206

IFN-α 2a, Human

Cat. No.: Z03003-1

Size: 1.0 mg

Synonyms: Leukocyte interferon, B cell interferon, Type I interferon, IFNA2, IFN-a 2a.

Description:

Interferon-Alpha 2a (IFN-Alpha 2a), Human produced by leukocytes is a member of Interferon family. IFN-alpha is mainly involved in innate immune response against a broad range of viral infections. IFN-alpha 2 has three acid stable forms (a,b,c) signaling through IFNAR2. IFN-alpha 2a shares 99.4% , 98.8% aa sequence identity with IFN-alpha 2b and 2c respectively. IFN-alpha contains four highly conserved cysteine residues which form two disulfide bonds, one of which is necessary for biological activity.

Recombinant Interferon-Alpha 2a (IFN-Alpha 2a), Human produced in *E. coli* is a single non-glycosylated polypeptide chain containing 165 amino acids. A fully biologically active molecule, rhIFN-Alpha has a molecular mass of 19.2kDa analyzed by reducing SDS-PAGE and is obtained by proprietary chromatographic techniques at GenScript.

Amino Acid Sequence:

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00001 CDLPQTHSLG SRRTLMLLAQ MRKISLFSCL KDRHDFGFPQ
00041 EEFGNQFQKA ETIPVLHEMI QQIFNLFSTK DSSAAWDETL
00081 LDKFYTELYQ QLNDLEACVI QGVGVTETPL MKEDSILAVR
00121 KYFQRITLYL KEKKYSPCAW EVVRAEIMRS FSLSTNLQES
00161 LRSKE
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Source: *E. coli*

Species: Human

Biological Activity: ED_{50} < 0.1 ng/ml, measured by a cytotoxicity assay using TF-1 Cells, corresponding to a specific activity of > 1.0×10^7 units/mg.

Molecular Weight: 19.2kDa, observed by reducing SDS-PAGE.

Formulation: Lyophilized after extensive dialysis against PBS.

Reconstitution: Reconstituted in ddH_2O at 100 µg/ml.

Purity: > 95% by SDS-PAGE and HPLC analyses.

Endotoxin Level: < 0.2 EU/µg, determined by LAL method.

Storage: Lyophilized recombinant human Interferon-Alpha 2a (rhIFN-Alpha 2a) remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, rhIFN-Alpha 2a should be stable up to 2 weeks at 4°C or up to 3 months at -20°C.

GenScript USA, Inc.
860 Centennial Ave. Piscataway, NJ 08854
Tel: 1-877-436-7274; 1-732-885-9188