



## **Overview**

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 <i>E. coli</i> 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.
Species	Human
Source	E. coli
<b>Biological Activity</b>	$ED_{50} < 0.1$ ng/ml, measured by a cytotoxicity assay using TF-1 Cells, corresponding to a specific activity of > $1.0 \times 10^7$ units/mg.
Sequence	CDLPQTHSLG SRRTLMLLAQ MRKISLFSCL KDRHDFGFPQ EEFGNQFQKA ETIPVLHEMI QQIFNLFSTK DSSAAWDETL LDKFYTELYQ QLNDLEACVI QGVGVTETPL MKEDSILAVR KYFQRITLYL KEKKYSPCAW EVVRAEIMRS FSLSTNLQES LRSKE

## **Properties**

Measured Molecula Weight	<sup>r</sup> 19.2kDa, observed by reducing SDS-PAGE.
Purity	> 95% by SDS-PAGE and HPLC analyses.
Formulation	Lyophilized after extensive dialysis against PBS.
Reconstitution	Reconstituted in ddH <sub>2</sub> O at 100 $\mu$ g/ml.
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.
Note	For research use only

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