

## IFN- $\alpha$ 2b

### Interferon $\alpha$ 2b

human, recombinant, *E. coli*

Cat. No.	Amount
PR-441	100 $\mu$ g

For *in vitro* use only  
Quality guaranteed for 12 months  
Store at -20°C

### Avoid freeze / thaw cycles

#### Form

Lyophilized. Lyophilized from a (1 mg/ml) solution containing 2.3 mg Sodium phosphate dibasic and 0.55 mg sodium phosphate monobasic buffer.

#### Solubility

It is recommended to reconstitute the lyophilized IFN- $\alpha$  in sterile bidest H<sub>2</sub>O not less than 100  $\mu$ g/ml, which can then be further diluted to other aqueous solutions. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

#### Activity

EC<sub>50</sub>: 2.6 x 10<sup>8</sup> IU/mg, determined in a viral resistance assay using bovine kidney MDBK cells.

#### Molecular Weight

19 kDa

#### Amino acid sequence

The sequence of the first five N-terminal amino acids was found to be Met-Cys-Asp-Leu-Pro

#### Purity

≥ 95% by SDS-PAGE and RP-HPLC

### Description

Recombinant IFN- $\alpha$  2b is a single, non-glycosylated polypeptide chain containing 166 amino acids.

At least 23 different variants of IFN- $\alpha$  are known. The individual proteins have molecular masses between 19-26 kDa and consist of proteins with lengths of 156-166 and 172 amino acids. All IFN- $\alpha$  subtypes possess a common conserved sequence region between amino acid positions 115-151 while the amino-terminal ends are variable. Many IFN- $\alpha$  subtypes differ in their sequences at only one or two positions. Naturally occurring variants also include proteins truncated by 10 amino acids at the carboxyterminal end.

Recombinant human Interferon- $\alpha$  2b produced in *E. coli* is a single, non-glycosylated, polypeptide chain containing 165 amino acids and having a molecular mass of 19.269 kDa. The Interferon- $\alpha$  2b gene was obtained from human leukocytes.

IFN- $\alpha$  2b is purified by proprietary chromatographic techniques.

### Selected References:

- Fuhrmann *et al.* (2004) Severe interstitial pneumonitis secondary to pegylated interferon alpha-2b and ribavirin treatment of hepatitis C infection. *Dig. Dis. Sci.* **49**:1966.
- Pohlen *et al.* (2004) Multicenter pilot study of 5-fluorouracil, folinic acid, interferon alpha-2b and degradable starch microspheres via hepatic arterial infusion in patients with nonresectable colorectal liver metastases. *Anticancer Res.* **24**:3275.
- Ross *et al.* (2004) Systemic remission of non-Hodgkin's lymphoma after intralesional interferon alpha-2b to bilateral conjunctival lymphomas. *Am. J. Ophthalmol.* **138**:672.
- Siegelmann-Danieli *et al.* (2004) Interstitial pneumonitis in a patient with melanoma treated with the high dose interferon alpha 2b regimen. *Isr. Med. Assoc. J.* **6**:636.
- Chen *et al.* (2004) Adjunctive treatment with interferon alpha-2b may decrease the risk of papilloma-associated conjunctival intraepithelial neoplasm recurrence. *Cornea* **23**:726.
- Biselli *et al.* (2004) Hepatic artery stenosis in liver transplanted patients treated with pegylated interferon alpha-2b and ribavirin. *Transplantation* **78**:953.