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Product Data Sheet

Cat # SB-005-10	Recombinant Human Interferon-alpha 2b (IFNa2b)	**Size:** 10 ug
Cat # SB-005-50	Recombinant Human Interferon-alpha 2b (IFNa2b)	**Size:** 50 ug
Cat # SB-005-1000	Recombinant Human Interferon-alpha 2b (IFNa2b)	**Size:** 1000 ug

Background:
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 carboxyl-terminal end.

Description:
Recombinant Human Interferon-alpha 2b produced in *E. coli* is a single, non-glycosylated, polypeptide chain containing 166 amino acids and having a molecular mass of 19400 Dalton. The Interferon-alpha 2b gene was obtained from human leukocytes.

Quality Control:

Biological activity: The specific activity as determined in a viral resistance assay using VSV- WISH cells was found to be greater than 1.0×10^8 IU/ mg.
Purity: Greater than 95% as determined by
(a) Analysis by SEC-HPLC.
(b) Analysis by reducing and non-reducing SDS-PAGE Silver Stained gel.

Molecular weight: 19.2KD+/-10% determined by reduced SDS-PAGE.

Isoelectric Point: The main zone between 5.5~6.8 analysis by IEF.

UV Scan: The maximal absorption wave is 278+/-3nm.

Amino-Acid Sequence: The sequence of the first fifteen N-terminal amino acids was determined and was found to be Met-Cys-Asp-Leu-Pro-Gln-Thr-His-Ser-Leu-Gly-Ser-Arg- Arg-Thr-Leu.

Residual DNA: less than 300ng/mg analysis by solid phase blot.

Residual host cell protein: less than 0.1% analysis by ELISA.

Endotoxin: Less than 0.3ng/µg (0.3IEU/µg) determined by LAL test.

Formulation: Lyophilized from a (1mg/ml) solution in containing 8.8mg sodium chloride, 0.4mg sodium acetate and 1.0mg acetate acid buffer.

Storage: Lyophilized rHuIFN-alpha 2b although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution rHuIFN-alpha 2b should be stored at 4°C between 2-7 days and for future use below -18°C. For long-term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

Please avoid freeze-thaw cycles.

Reconstitution: It is recommended to reconstitute the lyophilized rHuIFN-alpha2b in sterile 18M¦¸-cm H_2O not less than 100µg/ml, which can then be further diluted to other aqueous solutions

Usage:
This item is for LABORATORY RESEARCH USE ONLY. The product may not be used as drugs, agricultural or pesticidal products, food additives or household chemicals If supplied in powder then reconstitute it in 100 ul water for 1 mg/ml stock and store in liquid at 4oC for ~1 week or aliquots in suitable size and store at -20oC for long term storage..

Rev. 80225F