Interferon α 2a
human, recombinant, E. coli

<table>
<thead>
<tr>
<th>Cat. No.</th>
<th>Amount</th>
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<td>PR-439</td>
<td>100 µg</td>
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For in vitro use only
Quality guaranteed for 12 months
Store at -20°C
Avoid freeze / thaw cycles

Form
Lyophilized white powder.

Solubility
It is recommended to reconstitute the lyophilized IFN-α in sterile bidest H₂O not less than 100 µg/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
EC₅₀: 2.7 x 10⁻⁸ U/mg, determined in a viral resistance assay using bovine kidney MDBK cells.

Molecular Weight
19.2 kDa

Purity
≥ 95% by SDS-PAGE and RP-HPLC

Description
Interferon-α is a single, non-glycosylated polypeptide chain containing 165 amino acids.
At least 23 different variants of IFN-α 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-α subtypes possess a common conserved sequence region between amino acid positions 115-151 while the amino-terminal ends are variable. Many IFN-α 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 IFN-α 2a produced in E. coli is a single, non-glycosylated, polypeptide chain containing 165 amino acids and having a molecular mass of 19.2 kDa. The Interferon-α 2a gene was obtained from human leukocytes.
The IFN-α is purified by proprietary chromatographic techniques.

Aminoacid Sequence
The sequence of the first five N-terminal aminoacids was determined and was found to be Cys-Asp-Leu-Pro-Gln, conforming to the sequence of native human IFN-a.
N-terminal methionine has been completely removed enzymatically.

Selected References:
Sgorbissa et al. (2011) Type I IFNs signaling and apoptosis resistance in glioblastoma cells. Apoptosis 16(12):1229.