

Recombinant Human Interferon Alfa-2a

Catalog Number: SJC01

Strength: 20 μ g, 100 μ g

Specifications and Use

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| Description | <ul style="list-style-type: none">● Recombinant human IFN α-2a produced in Yeast is a single, non-glycosylated, polypeptide chain containing 165 amino acids, two pairs of disulfide bonds and having a molecular mass of approximately 19.2kD. |
| Source | <ul style="list-style-type: none">● Yeast. |
| Molecular Mass | <ul style="list-style-type: none">● Approximately 19.2kD. |
| Purity | <ul style="list-style-type: none">● $\geq 97\%$. |
| Endotoxin Level | <ul style="list-style-type: none">● <1EU/μg, determined by the LAL method. |
| Biological Activity | <ul style="list-style-type: none">● Bioactivity is detected using cytopathic effect inhibition assay method, MDBK cell (Madin-Darby bovine kidney) as dependent cell strain. The specific activity shall be not less than 2.0×10^8 IU/mg. |
| Formulation | <ul style="list-style-type: none">● Lyophilized from a 0.2μm filtered solution in 20mM Phosphate buffer. |
| Reconstitution | <ul style="list-style-type: none">● It is recommended to reconstitute the lyophilized rHuIFNα-2a in 0.2ml sterile water. |
| Storage | <ul style="list-style-type: none">● Lyophilized samples are stable for 36 months from date of manufacture at -20$^{\circ}$C to -70$^{\circ}$C.● Upon reconstitution, this cytokine can be stored under sterile conditions at 2-8$^{\circ}$C for one month or at -20$^{\circ}$C to -70$^{\circ}$C in a manual defrost freezer for three months without detectable loss of activity.● Avoid repeated freeze-thaw cycles. |

Human Interferon Alfa-2a

Human Interferon Alfa-2a is a single polypeptide chain of 165 amino acids residues, containing 4 Cys to form two disulfide bonds at positions of Cys 1- Cys 98 and Cys 29- Cys 138, and it has a molecular mass of approximately 19.2kD.

IFN can exert certain cell activities through binding to specific cell surface receptors, as firstly induce to develop special proteins, such as protein kinase and 2', 5'-oligo polyadenylic acid synthase etc. The unique character of two enzymes is that they can be activated respectively by double chains RNA to produce the effect of self-phosphorylation. INF can also enhance phagocytosis activity of macrophage and special toxicity of lymphocyte to target cells to cause immunoregulation.

Its biological effects contain: (1) Anti-virus: INF α has broad-spectrum anti-virus effect; (2) Cytostatic effect to certain cells; (3) Immunoregulation effect: accelerate the expression of MHC antigen by most cell and active NK cell and CTL. (4) Repress and kill tumor cells: INF- α kill the tumor cells through accelerating the immunological function and enhancing the killing ability of macrophage, NK and CTL.

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