SHANGHAI GENOMICS

Recombinant Human Interferon α-2a

rHuIFN α-2a

Catalog number: SG3110-11

Specifications and Use

Source	● *Yeast*.
Molecular Mass	● Approximately 19.2kDa.
Purity	● ≥ 97%, as determined by SDS-PAGE and HPLC method.
Biological Activity	● Bioactivity is detected using cytopathic effect inhibition assay method, WISH cell (a heteroploid human amnion cell line) as dependent cell strain. The specific activity shall be not less than 2.0×10^8 IU/mg.
Endotoxin Level	● ≤ 1EU/μg, determined by LAL method.
Formulation	● Lyophilized from a 0.2μm filtered solution in 20mM Phosphate buffer.
Solubility	● It is recommended to reconstitute the lyophilized rHuIFNα-2a in sterile ddH_2O containing at least 0.1% human serum albumin or bovine serum albumin to prepare a stock solution of no less than 1μg/mL of the cytokine.
Stability	● Lyophilized samples are stable for greater than six months from date of receipt at -20℃ to -70℃. ● Upon reconstitution, this cytokine can be stored under sterile conditions at 2-8℃ for one month or at -20℃ to -70℃ in a manual defrost freezer for three months without detectable loss of activity. ● Avoid repeated freeze-thaw cycles.
Usage	● FOR RESEARCH USE ONLY. NOT FOR HUMAN USE.

Human Interferon Alpha-2a

Human Interferon Alpha-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 29 and Cys 98- Cys 138, and it has a molecular mass of approximately 19kD.

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. IFN can also enhance phagocytosis activity of macrophage and special toxicity of lymphocyte to target cells to cause immunoloregulation.

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

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