

Human Interferon α -2a (INF- α 2a)

CATALOG NUMBER: INF-A2-020P, 20 μ g

Introduction	Human Interferon α -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 contains: (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.
Description	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	Yeast
Purity	\geq 97% purity (by SDS PAGE and HPLC)
Endotoxin Level	\leq 1 EU/mg, determined by the LAL 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.
Formulation	Lyophilized from a 0.2 μ m filtered solution in 20mM Phosphate Buffer Reconstitute with double distilled water at a concentration of no less than 1 μ g/ml with 0.1% human serum albumin (A highly purified plant-derived human serum albumin is strongly suggested to be used, Cat# HAS-1r) or bovine serum albumin as a stock.
Storage	Stable for 6-months from the date of shipment when kept at -20 $^{\circ}$ C or -70 $^{\circ}$ C. Upon reconstitution, it can be stored at 4 $^{\circ}$ C for at least one month or -20 $^{\circ}$ C for at least three months. Avoid repeated freeze-thaw cycles.
Usage	This product is produced for LABORATORY RESEARCH USE ONLY.

