

IL-24, Recombinant, Human (Interleukin-24, IL24, IL 23)

Catalog number

219936

Supplier

United States Biological

IL24 is a member of the IL10 family of cytokines. It was identified as a gene induced during terminal differentiation in melanoma cells. IL-10B encoded can induce apoptosis selectively in various cancer cells. Overexpression IL-24 leads to elevated expression of several GADD family genes, which correlates with the induction of apoptosis. The phosphorylation of mitogen-activated protein kinase 14 (MAPK7/P38), and heat shock 27kD protein 1 (HSPB2/HSP27) are found to be induced by this gene in melanoma cells, but not in normal immortal melanocytes. Alternatively spliced transcript variants encoding distinct isoforms have been reported. The glycosylation is essential for activity of IL-24. Functionally, IL-24 has diverse activities. At low concentrations, it induces type I proinflammatory cytokines such as IFN-g, IL-1b, IL-12 and TNF-a. At high concentration, it is a strong inducer of apoptosis in tumor cells, but not normal cells. mda-7/IL-24 is being hailed as a 'magic bullet' for cancer gene therapy. Recombinant human IL-24 produced in yeast is a single, glycosylated, polypeptide chain containing 158aa. As a result of glycosylation, the protein migrates at 19.5kD on SDS-PAGE.

Source

Recombinant protein corresponding to 158aa from human IL-24, expressed in *Sacharomyces cerevisiae*.

Molecular Weight

~19.5kD

Biological Activity

Measured by its ability to bind to the cell receptor of Capan-1 cells line resulted in Stat-3 activation. The ED50 for this effect is typically 1.0ng/ml.

Endotoxin

<0.1ng/ug

Storage and Stability

Lyophilized powder may be stored at -20°C. Reconstitute with sterile dH2O. Aliquot to avoid repeated freezing and thawing. Store at -20°C. Reconstituted product is stable for 6 months at -20°C. For maximum recovery of product, centrifuge the original vial after thawing and prior to removing the cap. Further dilutions can be made in assay buffer.

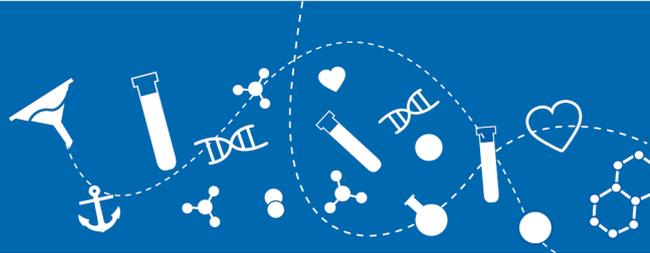
Formulation

Supplied as a lyophilized powder in PBS, BSA. Reconstitute with sterile ddH2O to >100ug/ml.

Purity

~98% (SDS-PAGE, HPLC)

Grade



Highly Purified

Storage

-20°C

MW

19.5

Antigen Modification

Recombinant, *Sacharomyces cerevisiae*