



Product Datasheet

Product Name	Interleukin-24 Human Recombinant
Cata No	CB500417
Source	<i>Sacharomyces cerevisiae</i>
Synonyms	C49A, FISP, MDA7, ST16, IL-24, IL10B, Mob-5, MDA-7, Suppression of tumorigenicity 16 protein, Melanoma differentiation-associated gene 7 protein.

Description

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 27kDa 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- γ , IL-1 β , IL-12 and TNF- α . 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.

Interleukin24 is a single, glycosylated, polypeptide human recombinant produced in yeast chain containing 158 amino acids and having a molecular mass of 18 kDa. As a result of glycosilation, the protein migrates at 19.5 kDa on

SDS-PAGE.

Physical Appearance

Sterile Filtered White lyophilized (freeze-dried) powder.

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 1.0 ng/mL.

Purity

Greater than 98.0% as determined by:
(a) Analysis by RP-HPLC.
(b) Analysis by SDS-PAGE.

Formulation

Lyophilized from a 0.2 μ m filtered solution in PBS with BSA as a carrier.

Stability

Lyophilized MDA7 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution MDA-7 Recombinant should be stored at 4°C between 2-7 days and for future use below -18°C.

For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

Please prevent freeze-thaw cycles.

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