California Bioscience

Product Datasheet

Product Name	Recombinant Rat Interleukin-18
Cata No	CB500278
Source	Escherichia Coli.
Synonyms	Interferon-gamma-inducing factor, IGIF, IL-1g, IL-18, IL1F4, MGC12320,
	IFN-gamma-inducing factor, Interleukin-1 gamma, IL-1 gamma, Iboctadekin.

Description

IL-18 is a proinflammatory cytokine. This cytokine can induce the IFN-gamma production of T cells. The combination of this cytokine and IL12 has been shown to inhibit IL4 dependent IgE and IgG1 production, and enhance IgG2a production of B cells. IL-18 binding protein (IL18BP) can specifically interact with this cytokine, and thus negatively regulate its biological activity.

Interleukin-18 Rat Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 158 amino acids and having a molecular mass of 18260 Dalton.

The IL-18 is purified by proprietary chromatographic techniques.

Purity

Greater than 95.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.

Specific Activity

The ED50 as determined by the dose-dependant stimulation of IFN-gamma by murine lymph node cells (4 x 10^5 cells/well) co-stimulated with sub

optimal dose of ConA (0.75ug/ml) is 12 ng/ml. The medium was RPMI containing 10% FCS and 50 μ M 2-ME.

Storage

Lyophilized Interleukin-18 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution IL18 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.

Formulation

Lyophilized from a concentrated (1mg/ml) solution in water containing 0.4 x PBS pH=7.2. It is recommended to reconstitute the lyophilized Interleukin 18 in sterile $18M\Omega$ -cm H2O not less than 100μ g/ml, which can then be further diluted to other aqueous solutions.