

Recombinant Mouse IFN β 1a / Interferon beta 1a,

Animal Free & Carrier Free

Cat #: C-CYP223

Size: 5 μ g, 20 μ g, 100 μ g, 500 μ g, 1mg

Shipping: Blue Ice

Product Overview

Interferon-beta is, a cytokine, released by fibroblasts and pathogen-exposed dendritic cells, macrophages, and endothelial cells . IFN beta 1a conducts through the heterodimeric IFN-alpha/beta Receptor. IFN-beta-deficient mice are easier to suffer from experimental autoimmune encephalomyelitis (EAE), a disease model of human multiple sclerosis (MS).In addition, IFN-beta has been proved to suppress the Th17 cell response in both MS and EAE and is usually used to treat MS disease.

Product Information

Source: *Escherichia Coli*.

Purity: >98% as determined by SDS-PAGE. Ni-NTA chromatography.

Biological Activity: Measure by its ability to protect HeLa cells infected with encephalomyocarditis (EMC) virus.

The ED₅₀ for this effect is < 5 pg/mL. The specific activity of recombinant mouse IFN beta 1a is > 1 x 10⁹ IU/ mg.

Endotoxin: <0.1EU per 1 μ g of the protein by the LAL method.

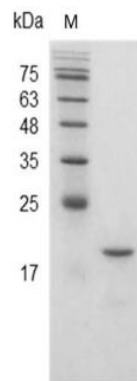
Amino acid sequence:

MINYKQLQLQERTNIRKCCQELLEQLNGKINLTYRADFKIPMEMTEKMQKSYTAFAIQEMLQNVFLVFRNFSSTG

WNETIVVRLLEDLHQQTVFLKTVLEEKQEERLTWEMSSTALHLKSYWVRVQRYLKLKMKYNSYAWMVVRAEIFRNF

LIIRRLTRNFQN with polyhistidine tag at the C-terminus.

Formulation: Lyophilized from a sterile filtered aqueous solution in 1 \times PBS, pH 7.4.



SDS-PAGE analysis of recombinant mouse IFN beta 1a

Usage Method

1. Before opening, it is recommended to centrifuge at 3000-3500 rpm for 5 minutes.
2. Reconstitute to a concentration of 0.1-1.0 mg/mL in sterile distilled H₂O. Allow the solution to sit at room temperature for at least 20 minutes to ensure complete dissolution. Avoid vigorous vortexing.
3. The reconstituted solution can be stored at 2-8°C for up to 1 week.
4. For long-term storage, it is recommended to further dilute the solution with a carrier protein (such as 0.1% BSA, 10% FBS, or 5% HSA) to a concentration of no less than 10 µg/mL and aliquot for storage at -20°C to -80°C for 3 to 6 months. If serum-free experiments are required, a 5% trehalose solution can be used as a carrier instead. Avoid repeated freeze-thaw cycles.

Storage

Physical Appearance	Storage	Stability
Lyophilized powder	-20°C to -80°C	1 year
Reconstitution (initial)	2°C to 8°C	Less than 1 week
Reconstitution (after dilution)	-20°C to -80°C	3 to 6 months

Note

The reagent is only used in the field of scientific research, not suitable for clinical diagnosis or other purposes.