

Recombinant Swine, IL1 β / Interleukin-1 beta,

Animal Free & Carrier Free

Cat #: C-CYP105

Size: 5 μ g, 20 μ g

Shipping: Blue Ice

Product Overview

Interleukin 1 beta (IL-1 β) also known as leukocytic pyrogen, leukocytic endogenous mediator, mononuclear cell factor, lymphocyte activating factor and other names, is a cytokine protein that in humans is encoded by the IL1B gene. There are two genes for interleukin-1 (IL-1): IL-1 alpha and IL-1 beta (this gene). IL-1 β precursor is cleaved by cytosolic caspase 1 (interleukin 1 beta convertase) to form mature IL-1 β .

Product Information

Source: *Escherichia Coli*.

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

Biological Activity: Measure by its ability to induce D10.G4.1 cells proliferation. The ED₅₀ for this effect is < 3 ng/mL.

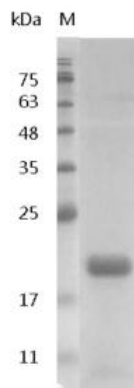
Endotoxin: <0.1EU per 1 μ g of the protein by the LAL method.

Amino acid sequence:

MANVQSMECKLQDKDKHKSLLVLAGPHMLKALHLLTGDLEKREVVFCMSFVQGDDSNKIPVTLGIKGNLYLSCVMKDNTPTLQLEDIDPK

RYPKRDMEKRFVFKTEIKNRVEFESALYPNWWYISTSQAEQKPVFLGNSKGRQDITDFTMEVLSP 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 swine IL-1 beta

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.