Recombinant Mouse IL1A

Cat No:HR2R2158

For research use only

Overview

Quantity	100 ?g
Gene Symbol	IL1A
Gene ID	16175
Accession	P01582
Alternative Name	IL-1 alpha, IL1a Recombinant Mouse Interleukin-1 Alpha (IL1A)
Species	Mouse
Source	E. coli
Description	Monocytes are the main source of secreted IL-1. They express predominantly IL-1- beta while human keratinocytes express large amounts of IL-1-alpha. Murine macrophages display a transition from IL-1-beta to IL-1-alpha production during maturation of monocytes into inflammatory macrophages. There are two functionally almost equivalent forms of IL-1, IL-1-alpha and IL-1-beta that are encoded by two different genes. IL-1-beta is the predominant form in humans while it is IL-1-alpha in mice. Both forms of IL-1 bind to the same receptor and therefore also show similar if not identical biological activities. The IL-1-beta but not the IL-1-alpha precursor must be processed before it can bind to the receptor. Both forms of IL-1 bind to the same receptor and therefore also show similar if not identical biological activities. The receptor isolated from T-cells is expressed predominantly on T cells and cells of mesenchymal origin. It binds both types of IL-1 with equal affinity. This type is called also Type 1 receptor. It has been designated CD121a. The Type 2 receptor has been designated CD121b. It is isolated from B-cells, granulocytes, and macrophages. It is expressed predominantly on B-cells and cells of the myelomonocytic lineage and is encoded by a separate gene.
Functions	The ED(50) was determined by a cell proliferation assay using the murine helper T cell line, D10.G4., was found to be 10.0 pg/mL.
Formulation	Recombinant mouse Interleukin-1 alpha was lyophilized from a 0.2 ?m filtered PBS solution.
Solubility	A quick spin of the vial followed by reconstitution in distilled water to a concentration not less than 0.1 mg/mL. This solution can then be diluted into other buffers.
Appearance	Lyophilized Powder
Molecular Weight	18
Purity	>95% as determined by SDS-PAGE
Concentration	< 1.0 EU/?g of recombinant protein as determined by the LAL method.
Shipping Condition	Ambient Temperature

Storage Condition	The lyophilized protein is stable for at least one year from date of receipt at -70?C. Upon reconstitution, this cytokine can be stored in working aliquots at 2? - 8?C for one month, or at -20?C for six months, with a carrier protein without detectable loss of activity. Avoid repeated freeze/thaw cycles.

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