Recombinant Mouse IL-1 beta/IL-1F2, Tag Free

Information

Accession #	NP_032387
Alternate Names	IL1 beta; IL-1; IL1B; IL-1b; IL1-BETA; IL-1F2; IL1F2IL-1 beta; interleukin 1-beta
Source	Human embryonic kidney cell, HEK293-derived mouse IL-1 beta/IL-1F2 protein
Protein sequence	Val118-Ser269
M.Wt	17.5 kDa
Appearance	Solution protein
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. - 3 years from date of receipt, -20 to -7°C as supplied.
Concentration	0. 2 mg/mL
Formulation	Dissolved in sterile PBS buffer.
Reconstitution	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. This solution can be diluted into other aqueous buffers.
Biological Activity	The EC50 for this effect is 1-4 pg/mL. Measured in a cell proliferation assay using D10.G4.1 mouse helper T cells.
Shipping Condition	Shipping with dry ice.
Handling	Centrifuge the vial prior to opening.
Usage	For Research Use Only! Not to be used in humans.

Quality Control

Purity	> 95%, determined by SDS-PAGE.
Endotoxin	<0.010 EU per 1 ug of the protein by the LAL method.

Description

Interleukin 1 is a name that designates two pleiotropic cytokines, IL-1 alpha (IL-1F1) and IL-1 beta (IL-1F2), which are the products of distinct genes. IL-1 alpha and IL-1 beta are structurally related polypeptides that share approximately 17% amino acid (aa) identity in mouse. Both proteins are produced by a wide variety of cells in response to inflammatory agents, infections, or microbial endotoxins. While IL-1 alpha and IL-1 beta are regulated independently, they bind to the same receptor and exert identical biological effects [1-4]. The mouse IL-1 beta cDNA encodes a 269 aa precursor. A 117 aa propeptide is cleaved intracellularly by the cysteine protease IL-1 beta -converting enzyme (Caspase-1/ICE) to generate the active cytokine [5, 6]. The17 kDa mature mouse IL-1 beta

shares 90% aa sequence identity with cotton rat and rat and 65%-78% identity with canine, equine, feline, human, porcine, and rhesus IL-1 beta.

Reference

[1]. Allan, S.M. et al. (2005) Nat. Rev. Immunol. 5:629.

[2]. Boraschi, D. and A. Tagliabue (2006) Vitam. Horm. 74:229.

[3]. Kornman, K.S. (2006) Am. J. Clin. Nutr. 83:475S.

[4]. Isoda, K. and F. Ohsuzu (2006) J. Atheroscler. Thromb. 13:21.

[5]. Gray, P.W. et al. (1986) J. Immunol. 137:3644.

[6]. Martinon, F. and J. Tschopp (2007) Cell Death Differ. 14:10.

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www.apexbt.com

7505 Fannin street, Suite 410, Houston, TX 77054.

Tel: +1-832-696-8203 | Fax: +1-832-641-3177 | Email: info@apexbt.com