



# Goat anti Mouse IL1B polyclonal antibody [Biotin] (CABT-L309)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

Specificity	Detects mouse IL-1 beta in ELISAs and Western blots. In sandwich immunoassays, less than 4% cross-reactivity with recombinant rat (rr) IL-1 beta is observed and less than 0.05% cross-reactivity with rhIL-1 beta and rmIL-1 alpha is observed.	
Target	IL-1beta/IL-1F2	
Immunogen	E. coli-derived recombinant mouse IL-1 beta, Val118-Ser269, Accession #NP_032387	
Isotype	IgG	
Source/Host	Goat	
Species Reactivity	Mouse	
Purification	Antigen Affinity-purified	
Conjugate	Biotin	
Applications	ELISA(Det), WB	
Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.	
Format	Lyophilized	
Size	50 μg	
Buffer	PBS with BSA	
Preservative	None	
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of	

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receipt, -20 to -70 °C as supplied. 1 month, 2 to 8 °C under sterile conditions after reconstitution. 6 months, -20 to -70 °C under sterile conditions after reconstitution.

Ship

The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

### BACKGROUND

#### Introduction

IL-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. IL-1 RI binds directly to IL-1 alpha or IL-1 beta b and then associates with IL-1 R accessory protein (IL-1 R3/IL-1 R AcP) to form a high-affinity receptor complex that is competent for signal transduction. IL-1 RII has high affinity for IL-1 beta but functions as a decoy receptor and negative regulator of IL-1 beta activity. IL-1ra functions as a competitive antagonist by preventing IL-1 alpha and IL-1 beta from interacting with IL-1 RI. 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. The 17 kDa mature mouse IL-1 beta b 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.

#### Keywords

 $catabolin; IL1\ beta; IL-1\ beta; IL-1; IL1B; IL-1b; IL1-BETA; IL-1F2; IL1F2 IL-1\ beta; interleukin 1; beta; interleukin-1\ beta; preinterleukin 1\ beta; pro-interleukin-1-beta$ 

## **GENE INFORMATION**

Entrez Gene ID	<u>16176</u>

UniProt ID P10749

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