



Goat anti Rat IL1B polyclonal antibody (CABT-L340)

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

PRODUCT INFORMATION

Specificity	Detects rat IL-1 beta /IL-1F2 in ELISAs and Western blots. In sandwich immunoassays, less than 1% cross-reactivity with recombinant mouse IL-1 beta is observed and less than 0.5% cross-reactivity with recombinant human IL-1 beta and recombinant porcine IL-1 beta is observed.
Target	IL-1beta/IL-1F2
Immunogen	E. coli-derived recombinant rat IL-1 beta /IL-1F2, Val117-Ser268, Accession #Q63264
Isotype	IgG
Source/Host	Goat
Species Reactivity	Rat
Purification	Antigen Affinity-purified
Conjugate	Unconjugated
Applications	ELISA(Cap), ICC/IF, WB
Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Format	Lyophilized; Small package size(SP): Liquid
Size	100 µg
Buffer	PBS with Trehalose
Preservative	None

Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of 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. *Small pack size (SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C.

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 26% amino acid (aa) identity in rat. 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 rat IL-1 beta cDNA encodes a 268 aa precursor. A 116 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 rat IL-1 beta b shares 90% aa sequence identity with cotton rat and mouse and 65-77% with canine, equine, feline, human, porcine, and rhesus macaque IL-1 beta.
Keywords	catabolin;IL1 beta;IL-1 beta;IL-1;IL1B;IL-1b;IL1-BETA;IL-1F2;IL1F2IL-1 beta;interleukin 1; beta;interleukin-1 beta;preinterleukin 1 beta;pro-interleukin-1-beta

GENE INFORMATION

Entrez Gene ID	24494
UniProt ID	Q63264