



# Rabbit Anti-Human IL-1 beta monoclonal antibody, clone QT1193 (DMABB-JX641)

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

## PRODUCT INFORMATION

<b>Immunogen</b>	Recombinant protein within full length human IL-1 beta
<b>Isotype</b>	IgG
<b>Source/Host</b>	Rabbit
<b>Species Reactivity</b>	Human
<b>Clone</b>	QT1193
<b>Purification</b>	Protein A affinity purified
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	<p>ELISA</p> <p>We recommend the following as antibody pair (Capture - Detection): DMABB-JX640 - DMABB-JX641</p> <p>Each laboratory should determine an optimum working titer for use in its particular application. Other applications have not been tested but use in such assays should not necessarily be excluded.</p>
<b>Format</b>	Purified, Liquid
<b>Concentration</b>	1 mg/ml
<b>Size</b>	100 µl
<b>Buffer</b>	PBS (pH7.4), BSA and Azide free
<b>Preservative</b>	None

**Storage**

For short-term storage, store at 2-8°C. For long-term storage, aliquot and store at -20°C or below. Avoid multiple freeze-thaw cycles.

---

## BACKGROUND

**Introduction**

Interleukin-1 beta (IL-1 beta) is a proinflammatory cytokine expressed by monocytes, macrophages, and dendritic cells. It is synthesized in response to inflammatory stimuli as a 31 kDa inactive pro-form that accumulates in the cytosol. Cleavage of pro-IL-1 beta into the active 17 kDa protein requires the activation of inflammasomes, which are multi-protein complexes that respond to pathogens, stress conditions, and other danger signals. Inflammasome activation triggers the processing of the caspase-1 precursor into its active form, which in turn cleaves pro-IL-1 beta. IL-1 beta lacks a signal sequence peptide for classical ER/Golgi pathway and is instead secreted alongside caspase-1 via an alternate and incompletely understood mechanism. Although IL-1 beta is most often secreted in its active form, secretion of the uncleaved protein may be detectable under some biological conditions. IL-1 beta signals through two receptors, IL-1RI and IL-1RII, both of which are shared with IL-1 alpha. These cytokines play important roles in innate host defense by triggering the production of other proinflammatory cytokines in target cells and initiating acute-phase responses. Their activity can be moderated by IL-1 Receptor Antagonist (IL-1RA), a protein produced by many cell types that blocks receptor binding through competitive inhibition. Elevated levels of IL-1 beta have been associated with many chronic inflammatory conditions, giving IL-1RA or IL-1 beta neutralizing antibodies potential therapeutic value.

---

**Keywords**

IL1B; interleukin 1, beta; interleukin-1 beta; IL 1B; IL1 BETA; IL1F2; IL-1 beta; catabolin; preinterleukin 1 beta; pro-interleukin-1-beta; IL-1; IL1-BETA;

---

## GENE INFORMATION

**UniProt ID**

[P01584](#)

---