# abcam

### Product datasheet

## Anti-IL-1 beta antibody ab9787

★★★★★ 3 Abreviews 81 References 画像数 1

#### 製品の概要

製品名 Anti-IL-1 beta antibody

製品の詳細 Rabbit polyclonal to IL-1 beta

由来種 Rabbit

特異性 This antibody is used in our Rat IL-1beta EDK and was tested against the following rat growth

factors at 50ng/ml to determine if there was any cross reactivity: GM-CSF, IL1alpha, IL-2, IL-4, IL-10, SCF, & TNFalpha. No significant cross reactivity was detected. The antibody has not been tested against endogenous IL1beta, only recombinant protein and we cannot guarantee it will

detect endogenous protein.

アプリケーション 適用あり: Sandwich ELISA

種交差性 交差種: Recombinant fragment

免疫原 Recombinant full length protein corresponding to Rat IL-1 beta aa 1 to the C-terminus.

Database link: Q63264

ポジティブ・コントロール Recombinant rat IL-1 beta (lower limit of detection: 1.95 ng/lane)

特記事項 This product is no longer batch tested in IHC, for an IHC validated antibody please see ab156791

The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

Run BLAST with

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

製品の特性

製品の状態 Lyophilized:Reconstitute with 200µl of sterile water. Please note that if you receive this product in

liquid form it has already been reconstituted as described and no further reconstitution is

necessary.

保存方法 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term

パッファー No preservative, sterile filtered

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精製度 Immunogen affinity purified

**ポリ/モノ** ポリクローナル

アイソタイプ IgG

軽鎖の種類 unknown

#### アプリケーション

The Abpromise guarantee <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab9787の使用に適用されますアプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
Sandwich ELISA		Use a concentration of $0.5 - 2 \mu g/ml$ . To detect Rat IL-1 beta by sandwich ELISA (using 100 $\mu$ I/well antibody solution) a concentration of $0.5 - 2.0 \mu g/ml$ of ab9787 is required. This antigen affinity purified antibody, in conjunction with a <u>ab245863</u> detection antibody, allows the detection of at least $0.2 - 0.4 ng/well$ of recombinant Rat IL-1 beta.

#### ターゲット情報

機能 Potent proinflammatory cytokine. Initially discovered as the major endogenous pyrogen, induces

prostaglandin synthesis, neutrophil influx and activation, T-cell activation and cytokine production, B-cell activation and antibody production, and fibroblast proliferation and collagen production.

Promotes Th17 differentiation of T-cells.

組織特異性 Expressed in activated monocytes/macrophages (at protein level).

**配列類似性** Belongs to the IL-1 family.

翻訳後修飾 Activation of the IL1B precursor involves a CASP1-catalyzed proteolytic cleavage. Processing

and secretion are temporarily associated.

**細胞内局在** Cytoplasm, cytosol. Lysosome. Secreted, exosome. Cytoplasmic vesicle, autophagosome.

Secreted. The precursor is cytosolic. In response to inflammasome-activating signals, such as ATP for NLRP3 inflammasome or bacterial flagellin for NLRC4 inflammasome, cleaved and secreted. IL1B lacks any known signal sequence and the pathway(s) of its secretion is(are) not yet

fully understood (PubMed:24201029). On the basis of experimental results, several unconventional secretion mechanisms have been proposed. 1. Secretion via secretory lysosomes: a fraction of CASP1 and IL1B precursor may be incorporated, by a yet undefined

mature IL1B (PubMed:15192144). 2. Secretory autophagy: IL1B-containing autophagosomes may fuse with endosomes or multivesicular bodies (MVBs) and then merge with the plasma membrane releasing soluble IL1B or IL1B-containing exosomes (PubMed:24201029). However,

autophagy impacts IL1B production at several levels and its role in secretion is still controversial.

mechanism, into secretory lysosomes that undergo Ca(2+)-dependent exocytosis with release of

3. Secretion via exosomes: ATP-activation of P2RX7 leads to the formation of MVBs containing exosomes with entrapped IL1B, CASP1 and other inflammasome components. These MVBs undergo exocytosis with the release of exosomes. The release of soluble IL1B occurs after the lysis of exosome membranes (By similarity). 4. Secretion by microvesicle shedding: activation of

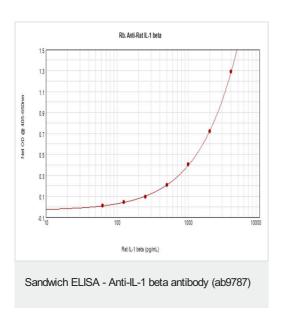
the ATP receptor P2RX7 may induce an immediate shedding of membrane-derived

microvesicles containing IL1B and possibly inflammasome components. The cytokine is then

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released in the extracellular compartment after microvesicle lysis (PubMed:11728343). 5. Release by translocation through permeabilized plasma membrane. This may occur in cells undergoing pyroptosis due to sustained activation of the inflammasome (By similarity). These mechanisms may not be not mutually exclusive.

#### 画像



This antigen affinity purified antibody, in conjunction with a suitable detection antibody, allows the detection of at least 0.2 - 0.4 ng/well of recombinant Rat IL-1 beta.

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