

Human IL-1 beta ELISA Kit ab108865

★★★★★ [1 Abreviews](#) [2 References](#) [画像数 1](#)

製品の概要

製品名	Human IL-1 beta ELISA Kit										
検出方法	Colorimetric										
再現性	Intra-Assay (同時再現性)										
	<table border="1"> <thead> <tr> <th>サンプル</th> <th>N</th> <th>平均値</th> <th>SD</th> <th>CV%</th> </tr> </thead> <tbody> <tr> <td>Overall</td> <td></td> <td></td> <td></td> <td>5.6%</td> </tr> </tbody> </table>	サンプル	N	平均値	SD	CV%	Overall				5.6%
サンプル	N	平均値	SD	CV%							
Overall				5.6%							
	Inter-Assay (日差再現性)										
	<table border="1"> <thead> <tr> <th>サンプル</th> <th>N</th> <th>平均値</th> <th>SD</th> <th>CV%</th> </tr> </thead> <tbody> <tr> <td>Overall</td> <td></td> <td></td> <td></td> <td>9.7%</td> </tr> </tbody> </table>	サンプル	N	平均値	SD	CV%	Overall				9.7%
サンプル	N	平均値	SD	CV%							
Overall				9.7%							
サンプルの種類	Cell culture supernatant, Serum, Plasma, Tissue, Cell Lysate										
アッセイタイプ	Sandwich (quantitative)										
検出感度	1.5 pg/ml										
検出範囲	3.91 pg/ml - 250 pg/ml										
全工程の試験時間	5h 00m										
ステップ	Multiple steps standard assay										
種交差性	交差種: Human										
製品の概要	Human IL-1 beta <i>in vitro</i> ELISA (Enzyme-Linked Immunosorbent Assay) kit is designed for the quantitative measurement of IL-1 beta concentrations in cell culture supernatants, serum and plasma.										

An IL-1 beta specific antibody has been precoated onto 96-well plates and blocked. Standards or test samples are added to the wells and subsequently an IL-1 beta specific biotinylated detection antibody is added and then followed by washing with wash buffer. Streptavidin-Peroxidase Conjugate is added and unbound conjugates are washed away with wash buffer. TMB is then used to visualize Streptavidin-Peroxidase enzymatic reaction. TMB is catalyzed by Streptavidin-Peroxidase to produce a blue color product that changes into yellow after adding acidic stop solution. The density of yellow coloration is directly proportional to the amount of IL-1 beta captured in plate.

The entire kit may be stored at -20°C for long term storage before reconstitution - Avoid repeated freeze-thaw cycles.

試験プラットフォーム

Microplate

製品の特性

保存方法

Store at -20°C. Please refer to protocols.

内容	1 x 96 tests
100X Streptavidin-Peroxidase Conjugate	1 x 80µl
10X Diluent N Concentrate	1 x 30ml
1X Standard Diluent	1 x 2ml
20X Wash Buffer Concentrate	2 x 30ml
70X Biotinylated Human IL-1 beta Antibody	1 x 90µl
Chromogen Substrate	1 x 7ml
IL-1 beta Microplate (12 x 8 well strips)	1 unit
IL-1 beta Standard	1 vial
Sealing Tapes	3 units
Stop Solution	1 x 11ml

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

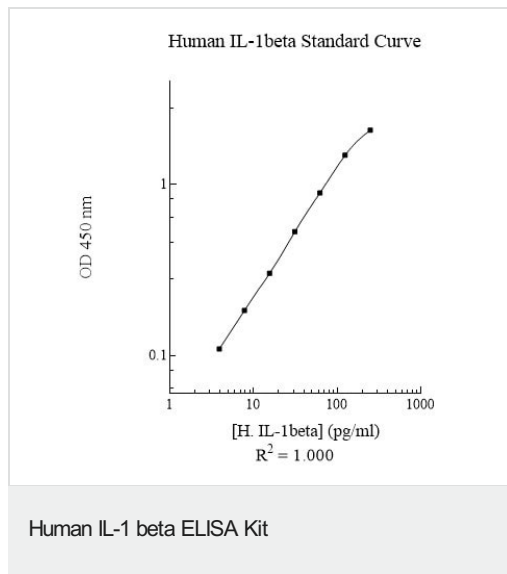
Activation of the IL1B precursor involves a CASP1-catalyzed proteolytic cleavage. Processing and secretion are temporarily associated.

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

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 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 mutually exclusive.

画像



Representative Standard Curve using ab108865.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.co.jp/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors