

# Human IL1 beta ELISPOT Kit ab46608

### 製品の概要

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製品名	Human IL1 beta ELISPOT Kit
検出方法	Colorimetric
サンプルの種類	Cell culture supernatant, Cell culture extracts
アッセイタイプ	Sandwich (qualitative)
ステップ	Multiple steps standard assay
種交差性	交差種: Human
製品の概要	<b>Intended use</b>

The ELISPOT assay is designed to enumerate cytokine producing cells in a single cell suspension. This method has the advantage of requiring a minimum of in-vitro manipulations allowing cytokine production analysis as close as possible to in-vivo conditions in a highly specific way. This technique is designed to determine the frequency of cytokine producing cells under a given stimulation, and the follow-up of such frequency during a treatment and/or a pathological state. Elispot assay constitutes an ideal tool in the TH1 / TH2 response, vaccine development, viral infection monitoring and treatment, cancerology, infectious diseases, autoimmune diseases and transplantation.

This Elispot assay is based on sandwich immuno-enzyme technology. Cell secreted cytokines or soluble molecules are captured by coated antibodies avoiding diffusion in supernatant, protease degradation or binding on soluble membrane receptors. After cell removal, the captured cytokines are revealed by tracer antibodies and appropriate conjugates.

### Principle of Method

After cell stimulation, locally produced cytokines are captured by a specific monoclonal antibody. After cell lysis, trapped cytokine molecules are revealed by a secondary biotinylated detection antibody, which is in turn recognised by streptavidin conjugated to alkaline phosphatase. PVDF-bottomed-well plates are then incubated with BCIP/NBT substrate. Colored "purple" spots indicate cytokine production by individual cells.

Recognizes natural (pro and mature) human IL1 beta.

特記事項	Store plates at room temperature.
アプリケーション	<b>適用あり:</b> ELISpot

## 製品の特性

**保存方法** Store at +4°C. Please refer to protocols.

内容	5 x 96 tests	10 x 96 tests
96 PVDF-bottomed-well plates.	5 units	10 units
Bovine Serum Albumin	1 x 1g	2 x 1g
Human IL-1 $\beta$ Capture antibody	1 x 500 $\mu$ l	2 x 500 $\mu$ l
IL-1 $\beta$ Biotinylated Detection antibody	1 vial	2 vials
Ready-to-use BCIP/NBT substrate buffer	1 x 50ml	2 x 50ml
Streptavidin - Alkaline Phosphatase conjugated	1 x 50 $\mu$ l	2 x 50 $\mu$ l

**関連性** IL1 beta is a member of the interleukin 1 cytokine family. It is produced by activated macrophages as a proprotein, which is proteolytically processed to its active form by caspase 1 (CASP1/ICE). IL1 beta is an important mediator of the inflammatory response, and is involved in a variety of cellular activities, including cell proliferation, differentiation, and apoptosis. The induction of cyclooxygenase-2 (PTGS2/COX2) by IL1 beta in the central nervous system is found to contribute to inflammatory pain hypersensitivity. This gene and eight other interleukin 1 family genes form a cytokine gene cluster on chromosome 2.

**細胞内局在** Secreted

## アプリケーション

Our [Abpromise guarantee](#) covers the use of **ab46608** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

アプリケーション	Abreviews	特記事項
ELISpot		Use at an assay dependent dilution.

**Please note:** All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

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