# abcam

# Product datasheet

# Rat IL-10 ELISA Kit ab214566

יעלשעבע SimpleStep ELISA

21 References 画像数7

製品の概要

製品名 Rat IL-10 ELISA Kit

検出方法 Colorimetric

再現性 Intra-Assay(同時再現性)

サンプル	N	平均値	SD	CV%
Overall	8			5.6%

Inter-Assay(日差再現性)

サンプル	N	平均值	SD	CV%
Overall	3			3.4%

サンプルの種類 Cell culture supernatant, Serum, Cit plasma

アッセイタイプ Sandwich (quantitative)

検出感度 4.89 pg/ml

検出範囲 31.3 pg/ml - 2000 pg/ml

添加回収試験 特定サンプルでの回収試験

サンプルの種類	平均 %	測定範囲
Cell culture supernatant	93	84% - 109%
Serum	94	93% - 94%
Cit plasma	86	85% - 89%

全工程の試験時間 1h 30m

ステップ One step assay

種交差性 交差種: Rat

非交差種: Cow

製品の概要 Rat IL-10 ELISA Kit (ab214566) is a single-wash 90 min sandwich ELISA designed for the

quantitative measurement of IL-10 protein in cell culture supernatant, cit plasma, and serum. It uses our proprietary SimpleStep ELISA® technology. Quantitate Rat IL-10 with 4.89 pg/ml sensitivity.

SimpleStep ELISA® technology employs capture antibodies conjugated to an affinity tag that is recognized by the monoclonal antibody used to coat our SimpleStep ELISA® plates. This approach to sandwich ELISA allows the formation of the antibody-analyte sandwich complex in a single step, significantly reducing assay time. See the SimpleStep ELISA® protocol summary in the image section for further details. Our SimpleStep ELISA® technology provides several benefits:

- Single-wash protocol reduces assay time to 90 minutes or less
- High sensitivity, specificity and reproducibility from superior antibodies
- Fully validated in biological samples
- 96-wells plate breakable into 12 x 8 wells strips

A 384-well SimpleStep ELISA® microplate (<u>ab203359</u>) is available to use as an alternative to the 96-well microplate provided with SimpleStep ELISA® kits.

Interleukin-10 is an anti-inflammatory cytokine involved in inhibition of a variety of other cytokines, including IFN-gamma, TNF, IL-2 and GM-CSF.

Pre-coated microplate (12 x 8 well strips)

# 特記事項

#### 試験プラットフォーム

### 製品の特性

# 保存方法

# Store at +4°C. Please refer to protocols.

内容	1 x 96 tests
10X Wash Buffer PT (ab206977)	1 x 20ml
Antibody Diluent 5BR	1 x 6ml
Plate Seals	1 unit
SimpleStep Pre-Coated 96-Well Microplate (ab206978)	1 unit
10X Rat IL-10 Capture Antibody	1 x 600µl
10X Rat IL-10 Detector Antibody	1 x 600µl
Rat IL-10 Lyophilized Recombinant Protein	2 vials
Sample Diluent 25BS	1 x 20ml
Sample Diluent NS (ab193972)	1 x 50ml
Stop Solution	1 x 12ml
TMB Development Solution	1 x 12ml

機能

Inhibits the synthesis of a number of cytokines, including IFN-gamma, IL-2, IL-3, TNF and GM-CSF  $\,$ 

produced by activated macrophages and by helper T-cells.

組織特異性

Produced by a variety of cell lines, including T-cells, macrophages, mast cells and other cell types.

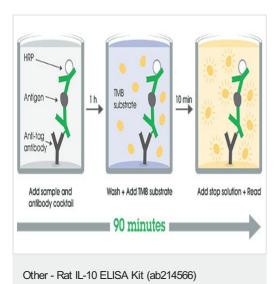
配列類似性

Belongs to the IL-10 family.

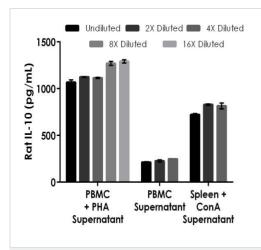
細胞内局在

Secreted.

# 画像

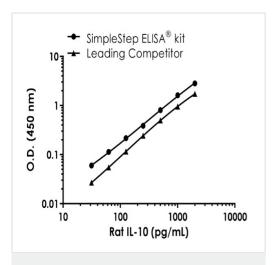


SimpleStep ELISA technology allows the formation of the antibodyantigen complex in one single step, reducing assay time to 90 minutes. Add samples or standards and antibody mix to wells all at once, incubate, wash, and add your final substrate. See protocol for a detailed step-by-step guide.

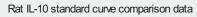


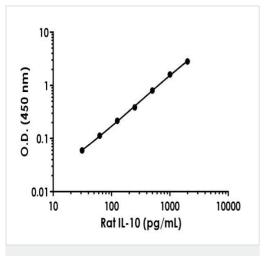
Interpolated concentrations of native IL-10 in rat cell culture supernatant samples.

The concentrations of IL-10 were measured in duplicates, interpolated from the IL-10 standard curves and corrected for sample dilution. Undiluted samples are as follows: rat PBMC stimulated with PHA (10  $\mu g/mL$ , 48 hours) supernatant 50%, unstimulated PBMC supernatant 100%, and spleen stimulated with concanavalin A (5  $\mu g/mL$ , 48 hours) supernatant 50%. The interpolated dilution factor corrected values are plotted (mean +/-SD, n=2). The mean IL-10 concentration was determined to be 1,174 pg/mL in PBMC stimulated with PHA supernatant, 230 pg/mL in unstimulated PBMC supernatant and 789 pg/mL in spleen stimulated with concanavalin A supernatant.



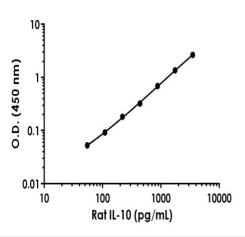
Standard curve comparison between rat IL-10 SimpleStep ELISA<sup>®</sup> kit and traditional ELISA kit from leading competitor. SimpleStep ELISA kit shows comparable sensitivity.





Background-subtracted data values (mean +/- SD) are graphed.

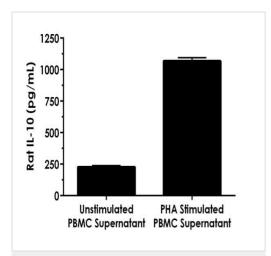
Example of rat IL-10 standard curve in Sample Diluent NS.



Example of rat IL-10 standard curve in Sample

Diluent 25BS.

Background-subtracted data values (mean +/- SD) are graphed.



Rat peripheral blood mononuclear cells were cultured unstimulated or stimulated with 10  $\mu g/mL$  PHA.

Conditioned media was harvested after 48 hours. IL-10 was measured in 50% unstimulated and PHA stimulated PBMC supernatant. The concentrations of IL-10 were measured in duplicate, interpolated from the IL-1beta standard curves and corrected for sample dilution. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean IL-10 concentration was determined to be 1,068 pg/mL in PHA stimulated PBMC supernatant and 227 pg/mL in unstimulated PBMC supernatant.



To learn more about the advantages of recombinant antibodies see **here**.

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