abcam

Product datasheet

Human IL-5 ELISA Kit ab215536

יילשעבע SimpleStep ELISA

1 References 画像数6

製品の概要

製品名

Human IL-5 ELISA Kit

検出方法

Colorimetric

再現性

Intra-Assay(同時再現性)

サンプル	N	平均值	SD	CV%
Overall	5			8.6%

Inter-Assay(日差再現性)

サンプル	N	平均值	SD	CV%	
Overall	3			5.4%	

サンプルの種類

Cell culture supernatant, Urine, Serum, Hep Plasma, EDTA Plasma, Cit plasma

アッセイタイプ

Sandwich (quantitative)

検出感度

3.3 pg/ml

検出範囲

4.7 pg/ml - 300 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	105	104% - 107%
Urine	81	80% - 81%
Serum	96	93% - 100%
Hep Plasma	99	97% - 100%
EDTA Plasma	94	93% - 96%
Cit plasma	93	90% - 96%

全工程の試験時間

1h 30m

ステップ

One step assay

種交差性

交差種: Human 非交差種: Cow

製品の概要

Human IL-5 ELISA Kit (ab215536) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of IL-5 protein in cell culture supernatant, cit plasma, edta plasma, hep plasma, serum, and urine. It uses our proprietary SimpleStep ELISA® technology. Quantitate Human IL-5 with 3.3 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.

特記事項

Interleukin 5 (IL-5) is a small, 113 amino acid cytokine produced by T cells involved in the differentiation of B-cells to immunoglobulin secreting cells. IL-5 is a key mediator in the survival and effector functions of mature eosinophils. Due to its effects on eosinophils, IL-5 is implicated in the pathogenesis of asthma and other hypereosinophilic inflammatory conditions.

試験プラットフォーム

Pre-coated microplate (12 x 8 well strips)

製品の特性

保存方法

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

内容	1 x 96 tests
10X Human IL-5 Capture Antibody	1 x 600µl
10X Human IL-5 Detector Antibody	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml
Antibody Diluent CPI - HAMA Blocker (ab193969)	1 x 6ml
Human IL-5 Lyophilized Recombinant Protein	2 vials
Plate Seals	1 unit
Sample Diluent NS (ab193972)	1 x 50ml

内容	1 x 96 tests
SimpleStep Pre-Coated 96-Well Microplate (ab206978)	1 unit
Stop Solution	1 x 12ml
TMB Development Solution	1 x 12ml

機能

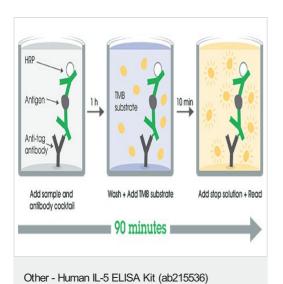
Factor that induces terminal differentiation of late-developing B-cells to immunoglobulin secreting

cells.

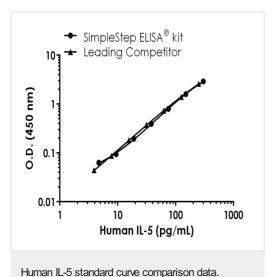
配列類似性 Belongs to the IL-5 family.

細胞内局在 Secreted.

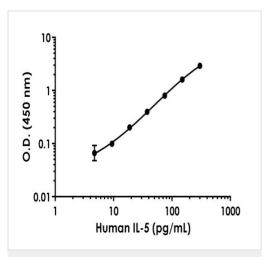
画像



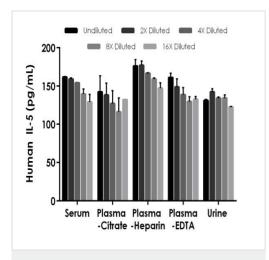
SimpleStep ELISA technology allows the formation of the antibodyantigen complex in one single step, reducing assay time to 90 minutes. Add samples or standards and antibody mix to wells all at once, incubate, wash, and add your final substrate. See protocol for a detailed step-by-step guide.



Standard curve comparison between human IL-5 SimpleStep $ELISA^{@}$ kit and traditional ELISA kit from leading competitor. SimpleStep ELISA kit shows comparable sensitivity with shorter protocol time.



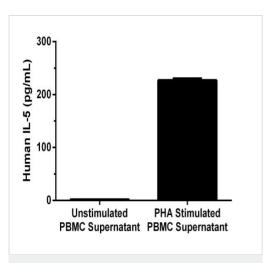
Example of human IL-5 standard curve in Sample Diluent NS.



Interpolated concentrations of spiked IL-5 in human serum, plasma and urine samples.

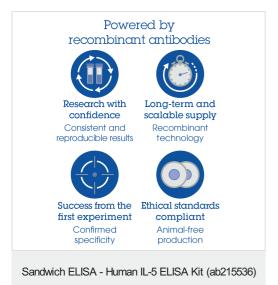
Background-subtracted data values (mean +/- SD) are graphed.

The concentrations of IL-5 were measured in duplicates, interpolated from the IL-5 standard curves and corrected for sample dilution. Undiluted samples are as follows: serum 50%, plasma (citrate) 50%, plasma (heparin) 50% and urine 50%. The interpolated dilution factor corrected values are plotted (mean +/-SD, n=2). The mean IL-5 concentration was determined to be 149 pg/mL in serum, 131 pg/mL in plasma (citrate), 165 pg/mL in plasma (heparin), 142 pg/mL in plasma (EDTA) and 133 pg/mL in urine.



Human peripheral blood mononuclear cells were cultured unstimulated or stimulated with 10 μ g/mL PHA.

Conditioned media was harvested after 48 hours. IL-5 was measured in 100% unstimulated and PHA stimulated PBMC supernatant. The concentrations of IL-5 were measured in duplicate, interpolated from the IL-5 standard curves and corrected for sample dilution. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean IL-5 concentration was determined to be 226.9 pg/mL in PHA stimulated PBMC supernatant and 1.94 pg/mL in unstimulated PBMC supernatant.



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

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