

Mouse IL-5 ELISA Kit ab204523

Recombinant SimpleStep ELISA

7 References 8 Images

Overview

Product name	Mouse IL-5 ELISA Kit				
Detection method	Colorimetric				
Precision	Intra-assay				
	Sample	n	Mean	SD	CV%
	Overall	5			3.3%
	Inter-assay				
	Sample	n	Mean	SD	CV%
	Overall	3			5.1%
Sample type	Cell culture supernatant, Serum, Hep Plasma, EDTA Plasma, Cit plasma				
Assay type	Sandwich (quantitative)				
Sensitivity	1.2 pg/ml				
Range	3.9 pg/ml - 250 pg/ml				
Recovery	Sample specific recovery				
	Sample type		Average %	Range	
	Cell culture supernatant		106	104% - 107%	
	Serum		105	101% - 107%	
	Hep Plasma		88	85% - 91%	
Assay time	1h 30m				
Assay duration	One step assay				
Species reactivity	Reacts with: Mouse Does not react with: Sheep, Goat				
Product overview	Mouse IL-5 ELISA Kit (ab204523) 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, and serum. It uses our proprietary SimpleStep ELISA® technology. Quantitate Mouse IL-5 with 1.2 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 ([ab203359](#)) is available to use as an alternative to the 96-well microplate provided with SimpleStep ELISA® kits.

Notes 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.

The standard is affinity purified.

Platform Pre-coated microplate (12 x 8 well strips)

Properties

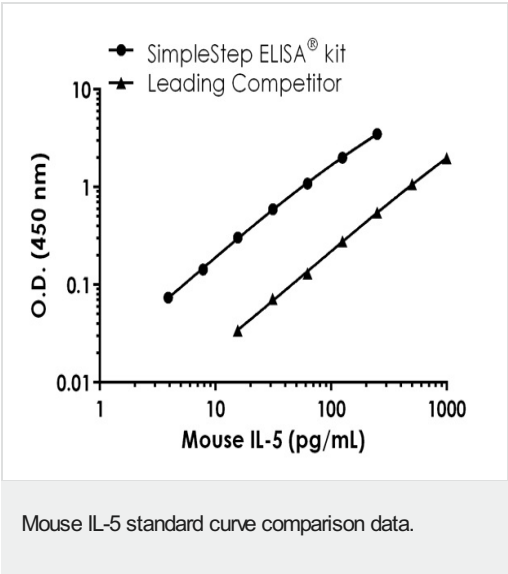
Storage instructions Store at +4°C. Please refer to protocols.

Components	1 x 96 tests
10X Mouse IL-5 Capture Antibody	1 x 600µl
10X Mouse IL-5 Detector Antibody	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml
Antibody Diluent 4BI	1 x 6ml
Mouse IL-5 Lyophilized Recombinant Protein	2 vials
Plate Seals	1 unit
Sample Diluent 25BP	1 x 20ml
Sample Diluent NS (ab193972)	1 x 50ml
SimpleStep Pre-Coated 96-Well Microplate (ab206978)	1 unit

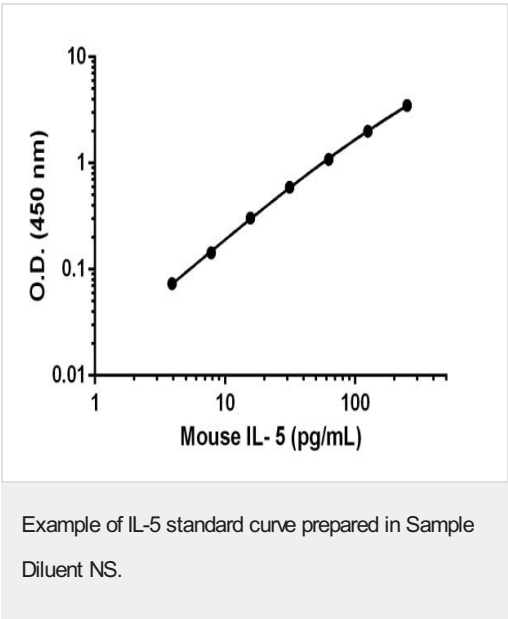
Components	1 x 96 tests
Stop Solution	1 x 12ml
TMB Development Solution	1 x 12ml

Function	Factor that induces terminal differentiation of late-developing B-cells to immunoglobulin secreting cells.
Sequence similarities	Belongs to the IL-5 family.
Cellular localization	Secreted.

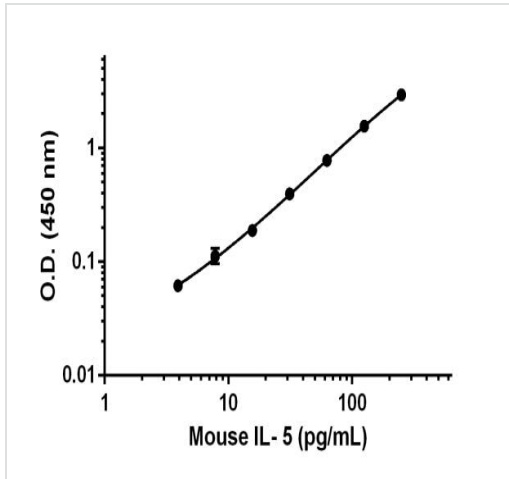
Images



Standard curve comparison between mouse IL-5 SimpleStep ELISA® kit and traditional ELISA kit from leading competitor. SimpleStep ELISA kit shows a 5-fold increase in sensitivity.

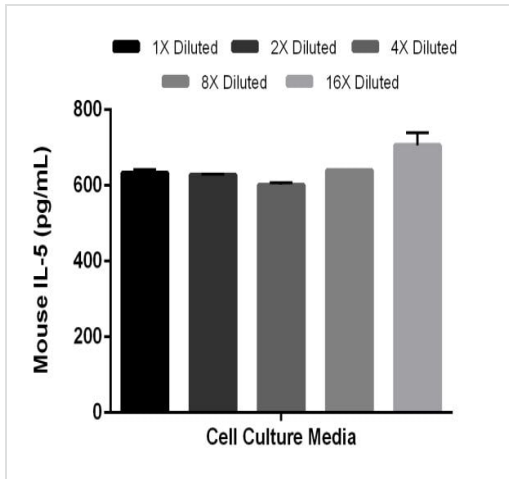


Background-subtracted data values (mean +/- SD) are graphed.



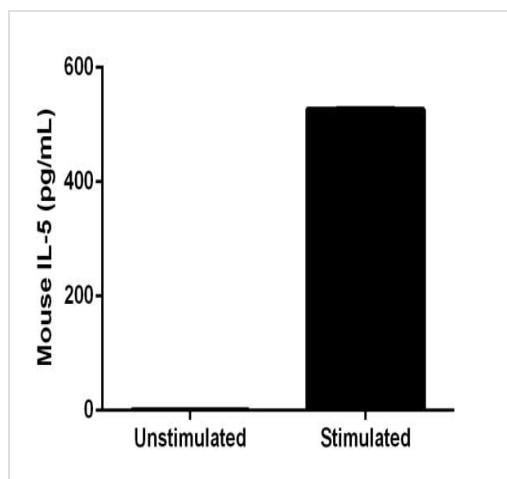
Background-subtracted data values (mean +/- SD) are graphed.

Example of IL-5 standard curve prepared in Sample Diluent 25BP.



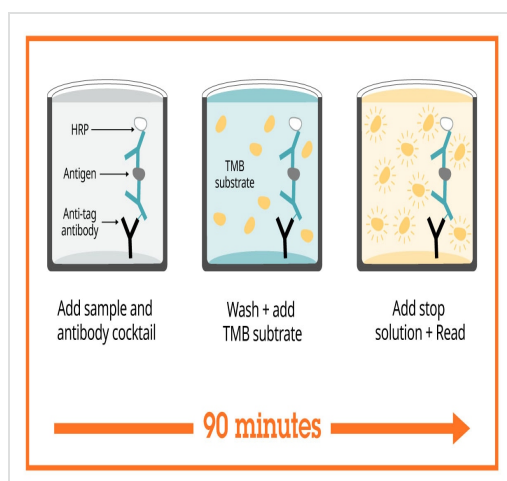
Interpolated concentrations of IL-5 in mouse cell culture media. The concentrations of IL-5 were measured in duplicate and interpolated from the IL-5 standard curve and corrected for sample dilution. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean IL-5 concentration was determined to be 642 pg/mL in mouse EL-4 (IL-2) PHA/PMA-stimulated supernatant.

Linearity of dilution of the assay.



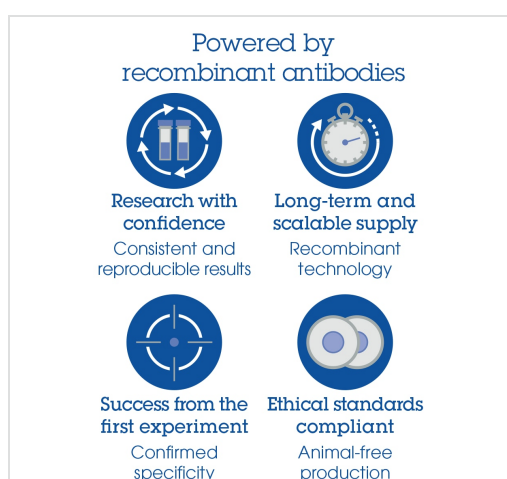
Comparison of secreted IL-5 in unstimulated and PHA/PMA stimulated EL-4 (IL-2) Cells.

EL-4 (IL-2) cells were grown in the absence (unstimulated) or presence of 10 ug/mL PHA and 10 ng/mL PMA (stimulated) for 48 hours. IL-5 was measured in undiluted cell culture supernatants of unstimulated and PHA/PMA stimulated EL-4 (IL-2). Measured values were interpolated from the IL-5 Standard Curve diluted in Sample Diluent NS. Mean of duplicate values +/-SD are graphed: 1.05 pg/mL unstimulated, 535 pg/mL stimulated.



Sandwich ELISA - Mouse IL-5 ELISA Kit (ab204523)

SimpleStep ELISA technology allows the formation of the antibody-antigen 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.



Sandwich ELISA - Mouse IL-5 ELISA Kit (ab204523)

To learn more about the advantages of recombinant antibodies see [here](#).

**Get more done with
SimpleStep ELISA**



Easy to use
Single-wash 90-minute
protocol



Flexible
Matched antibody pairs
available



Precision antibodies
High sensitivity, specificity
and reproducibility



Scalable
Now in 10-pack and
384-well formats

Sandwich ELISA - Mouse IL-5 ELISA Kit (ab204523)

To learn more about the advantages of SimpleStep ELISA[®] kits
see [here](#).

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