

Product datasheet

Mouse GM-CSF ELISA Kit (CSF2) αb201276

Recombinant SimpleStep ELISA®

7 Images

Overview

Product name	Mouse GM-CSF ELISA Kit (CSF2)				
Detection method	Colorimetric				
Precision	Intra-assay				
	Sample	n	Mean	SD	CV%
	Overall	5			6%
	Inter-assay				
	Sample	n	Mean	SD	CV%
	Overall	3			5.8%
Sample type	Cell culture supernatant				
Assay type	Sandwich (quantitative)				
Sensitivity	3.1 pg/ml				
Range	12.5 pg/ml - 800 pg/ml				
Recovery	Sample specific recovery				
	Sample type		Average %	Range	
	Cell culture supernatant		98	87% - 106%	
Assay time	1h 30m				
Assay duration	One step assay				
Species reactivity	Reacts with: Mouse				
Product overview	Mouse GM-CSF ELISA Kit (CSF2) (ab201276) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of GM-CSF (CSF2) protein in cell culture supernatant. It uses our proprietary SimpleStep ELISA® technology. Quantitate Mouse GM-CSF (CSF2) with 3.1 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 Mouse GM-CSF (CSF-2) is a ~25 kDa pleiotropic cytokine produced by a variety of cells (activated T and B cells, macrophages, mast cells, fibroblasts, endothelial cells) during inflammation or in response to cytokines. GM-CSF can induce proliferation and differentiation of myeloid progenitor cells into eosinophils, macrophages/monocytes, and neutrophils. It is also a survival factor for mature eosinophils, macrophages/monocytes, and neutrophils.

Platform Microplate (12 x 8 well strips)

Properties

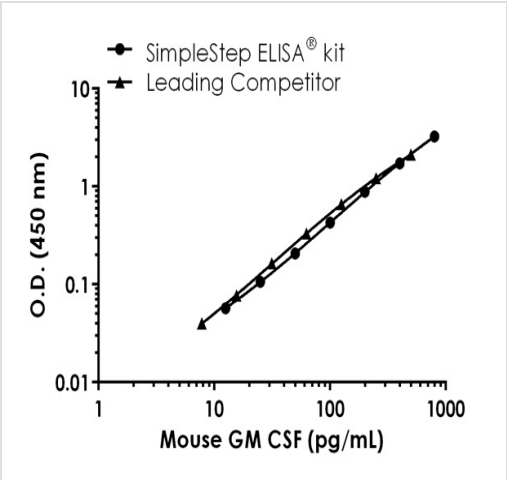
Storage instructions Store at +4°C. Please refer to protocols.

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

Function Cytokine that stimulates the growth and differentiation of hematopoietic precursor cells from various lineages, including granulocytes, macrophages, eosinophils and erythrocytes.

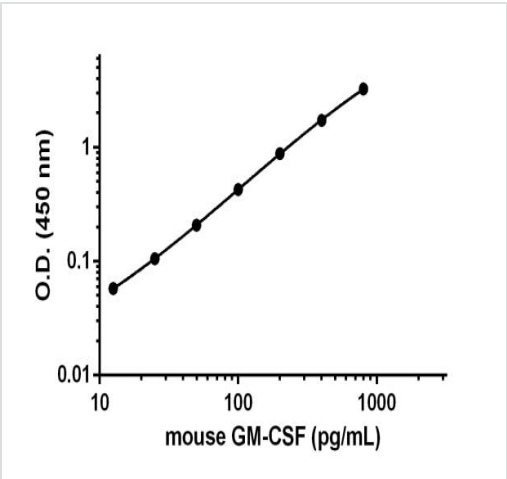
Sequence similarities Belongs to the GM-CSF family.

Cellular localization Secreted.



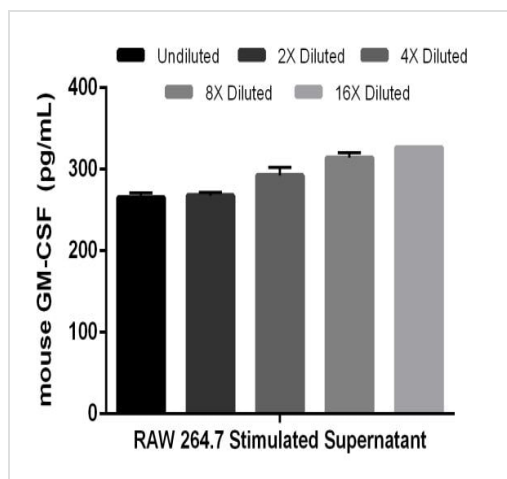
Mouse GM-CSF (CSF2) standard curve comparison data.

Standard curve comparison between mouse GM-CSF (CSF2) SimpleStep ELISA[®] kit and traditional ELISA kit from leading competitor. SimpleStep ELISA kit shows comparable sensitivity.



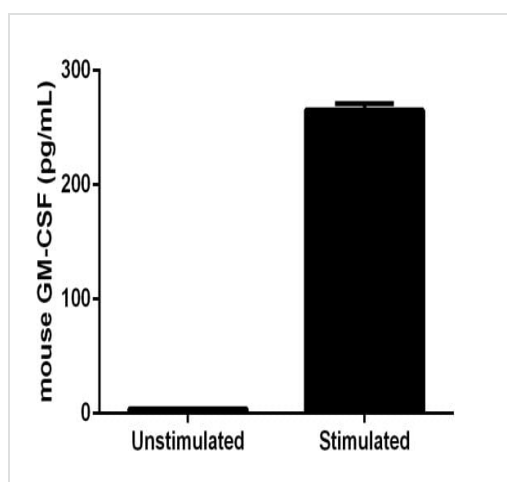
Example of GM-CSF standard curve.

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



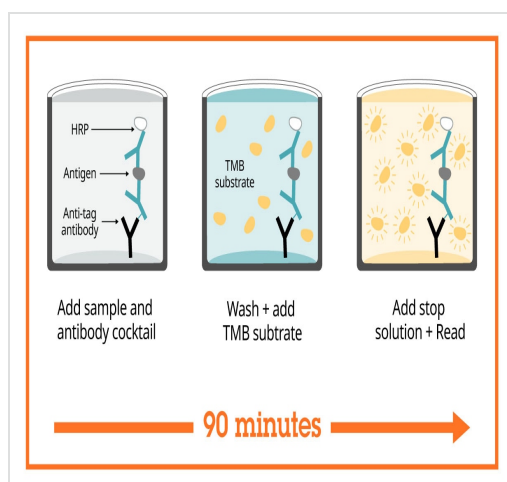
Linearity of dilution of the assay. Interpolated concentrations of GM-CSF in mouse cell culture media.

The concentrations of GM-CSF were measured in duplicate and interpolated from the GM-CSF standard curve and corrected for sample dilution. The interpolated dilution factor corrected values are plotted (mean \pm SD, $n=2$). The mean GM-CSF concentration was determined to be 289.7 pg/mL in mouse RAW LPS-stimulated supernatant.



Comparison of secreted GM-CSF in unstimulated and LPS stimulated RAW264.7 Cells.

RAW264.7 cells were grown in the absence (unstimulated) or presence of 5 μ g/mL Lipopolysaccharide (LPS) (stimulated) for 48 hours. GM-CSF was measured in undiluted cell culture supernatants of unstimulated and LPS stimulated RAW264.7. Measured values were interpolated from the GM-CSF Standard Curve diluted in Sample Diluent NS. Mean of duplicate values \pm SD are graphed: 4.1 pg/mL unstimulated, 269.5 pg/mL stimulated.



Sandwich ELISA - Mouse GM-CSF ELISA Kit
(CSF2) (ab201276)

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.

Powered by
recombinant antibodies



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Sandwich ELISA - Mouse GM-CSF ELISA Kit
(CSF2) (ab201276)

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 GM-CSF ELISA Kit
(CSF2) (ab201276)

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

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.com/abpromise> or contact our technical team.

Terms and conditions

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