abcam

Product datasheet

Mouse ICAM 1 ELISA Kit ab252355

重组 SimpleStep ELISA

4 References 9 图像

概述

产品名称

小鼠ICAM 1 ELISA试剂盒

检测方法

Colorimetric

精确度

批次内

样品	n	Mean	SD	CV%
Serum	8			4.6%

批次间

样品	n	Mean	SD	CV%
Serum	3			4%

样品类型

检测类型

灵敏度

范围

回收率

Cell culture supernatant, Serum, Tissue Culture Media, Hep Plasma, EDTA Plasma, Cit plasma

Sandwich (quantitative)

28.15 pg/ml

62.5 pg/ml - 4000 pg/ml

特定样本回收率

样品类型	平均%	范围
Cell culture supernatant	113	107% - 115%
Serum	96	81% - 111%
Tissue Extracts	91	82% - 99%
Hep Plasma	91	84% - 100%
EDTA Plasma	99	90% - 104%
Cit plasma	102	86% - 113%

检测时间 1h 30m

实验**步**骤 One step assay

 种属反应性
 与反应: Mouse

 不与反应: Cow

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产品概述

Mouse ICAM 1 ELISA Kit (ab252355) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of ICAM 1 protein in cell culture supernatant, cit plasma, edta plasma, hep plasma, serum, and tissue culture media. It uses our proprietary SimpleStep ELISA® technology. Quantitate Mouse ICAM 1 with 28.15 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.

ICAM1, is a cell surface glycoprotein typically expressed in endothelial cells and cells of the immune system. The extracellular portion of ICAM-1 forms five immunoglobulin like domains attached to a single hydrophobic transmembrane region and a short cytoplasmic tail. ICAM-1, binds to the Leukocyte Integrins LFA-1 (CD11a/CD18) and Mac-1 (CD11b/CD18) as well as to non-integrin ligands such as CD43, fibrinogen, hyaluronan, Rhinoviruses and *Plasmodium falciparum*-infected erythrocytes. Binding to LFA-1 facilitates trans-endothelial leukocyte migration to areas of inflammation via promotion of endothelial apical cups assembly. Mouse ICAM1 shares 92.6 % and 48.6 % sequence homology with rat and human ICAM1, respectively.

Abcam has not and does not intend to apply for the REACH Authorisation of customers' uses of products that contain European Authorisation list (Annex XIV) substances. It is the responsibility of our customers to check the necessity of application of REACH Authorisation, and any other relevant authorisations, for their intended uses.

Pre-coated microplate (12 x 8 well strips)

平台

说明

性能

存放说明

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

组 件	1 x 96 tests
10X Mouse ICAM 1 Capture Antibody	1 x 600µl
10X Mouse ICAM 1 Detector Antibody	1 x 600µl

组 件	1 x 96 tests
10X Wash Buffer PT (ab206977)	1 x 20ml
50X Cell Extraction Enhancer Solution (ab193971)	1 x 1ml
5X Cell Extraction Buffer PTR (ab193970)	1 x 10ml
Antibody Diluent 5BR	1 x 6ml
Mouse ICAM 1 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

功能	ICAM proteins are ligands for the leukocyte adhesion protein LFA-1 (integrin alpha-L/beta-2).
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During leukocyte trans-endothelial migration, ICAM1 engagement promotes the assembly of endothelial apical cups through ARHGEF26/SGEF and RHOG activation. In case of rhinovirus

infection acts as a cellular receptor for the virus.

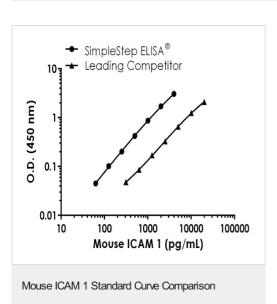
序列相似性 Belongs to the immunoglobulin superfamily. ICAM family.

Contains 5 lg-like C2-type (immunoglobulin-like) domains.

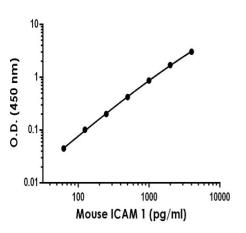
翻译后修饰 Monoubiquitinated, which is promoted by MARCH9 and leads to endocytosis.

细胞定位 Membrane.

图片

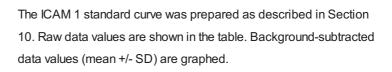


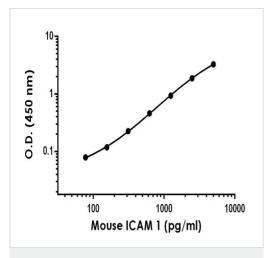
Standard Curve comparison between human Mouse ICAM 1 SimpleStep ELISA kit and traditional ELISA kit from leading competitor. SimpleStep ELISA kit shows increased sensitivity.



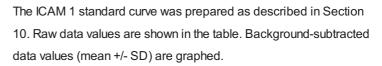
Example of mouse ICAM 1 standard curve in

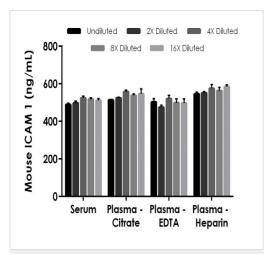
Sample Diluent NS.





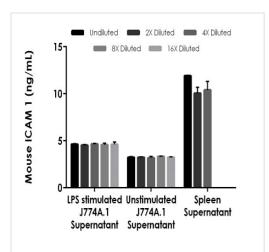
Example of mouse ICAM 1 standard curve in 1X Cell Extraction Buffer PTR.



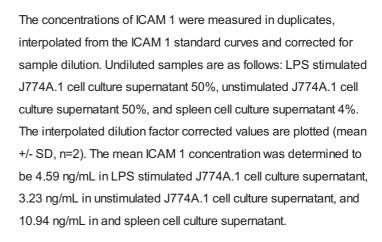


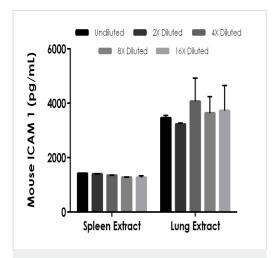
Interpolated concentrations of native ICAM 1 in mouse serum, plasma samples.

The concentrations of ICAM 1 were measured in duplicates, interpolated from the ICAM 1 standard curves and corrected for sample dilution. Undiluted samples are as follows: serum 1:200, plasma (citrate) 1:200, plasma (EDTA) 1:200 and plasma (heparin) 1:200. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean ICAM 1 concentration was determined to be 506.72 ng/mL in serum, 535.54 ng/mL in plasma (citrate), 498.48 ng/mL in plasma (EDTA), 563.77 ng/mL in and plasma (heparin).



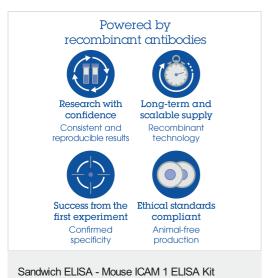
Interpolated concentrations of native ICAM 1 in LPS stimulated J774A.1 cell culture supernatant, unstimulated J774A.1 cell culture supernatant, and spleen cell culture supernatant samples.





Interpolated concentrations of native ICAM 1 in mouse spleen and mouse lung based on a 10 $\mu g/mL$ extract load.

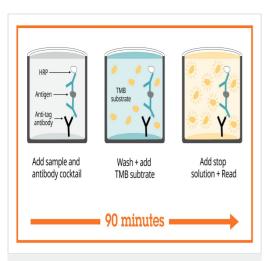
The concentrations of ICAM 1 were measured in duplicate and interpolated from the ICAM 1 standard curve and corrected for sample dilution. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean ICAM 1 concentration was determined to be 1341.51 pg/mL in spleen extract and 3625 pg/mL in lung extract.



(ab252355)

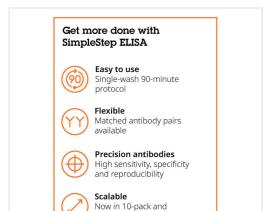
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To learn more about the advantages of recombinant antibodies see **here**.



Sandwich ELISA - Mouse ICAM 1 ELISA Kit

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.



To learn more about the advantages of SimpleStep ELISA $^{\!0}\!\!$ kits see $\underline{\text{here}}\!$.

Sandwich ELISA - Mouse ICAM 1 ELISA Kit (ab252355)

384-well formats

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