abcam

Product datasheet

Mouse P-Selectin ELISA Kit (CD62P) ab200014

Recombinant SimpleStepELISA

1 References 8 Images

Overview

Product name Mouse P-Selectin ELISA Kit (CD62P)

Detection method Colorimetric

Precision Intra-assay

Sample	n	Mean	SD	CV%
Serum	8			5.6%

Inter-assay

Sample specific recovery

Sample	n	Mean	SD	CV%
Serum	3			3.21%

Sample type Cell culture supernatant, Serum, Cell culture extracts, Cit plasma

Assay type Sandwich (quantitative)

Sensitivity 4.16 pg/ml

23.4 pg/ml - 1500 pg/ml Range

Recovery

Sample type	Average %	Range
Serum	112	107% - 116%
Cell culture media	119	118% - 120%
Hep Plasma	127	119% - 139%
EDTA Plasma	122	119% - 126%
Cit plasma	114	103% - 120%

Assay time 1h 30m

Assay duration One step assay

Species reactivity

Reacts with: Mouse

Does not react with: Goat, Cow, Pig

Product overview

Mouse P-Selectin ELISA Kit (CD62P) (ab200014) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of P-Selectin (CD62P) protein in cit plasma, serum, cell culture supernatant, and cell culture extracts. It uses our proprietary SimpleStep ELISA® technology. Quantitate Mouse P-Selectin (CD62P) with 4.16 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.

P-Selectin is the largest member of the selectin family, which are adhesion molecules that ensure efficient recruitment of leukocytes to inflammation sites. It is stored in platelets and endothelial cells in Weibel-Palade bodies and α -granules, and is expressed by membrane translocation. P-Selectin's main function is to mediate the interaction of activated endothelial cells or platelets with leukocytes, and most importantly, leukocyte rolling after trauma. High soluble levels of P-Selectin are thought to be predictive of future cardiovascular events.

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.

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 P-Selectin Capture Antibody	1 x 600µl
10X Mouse P-Selectin Detector Antibody	1 x 600µl
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

Notes

Components	1 x 96 tests
Antibody Diluent CP	1 x 6ml
Mouse P-Selectin 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 Ca(2+)-dependent receptor for myeloid cells that binds to carbohydrates on neutrophils and

monocytes. Mediates the interaction of activated endothelial cells or platelets with leukocytes. The ligand recognized is sialyl-Lewis X. Mediates rapid rolling of leukocyte rolling over vascular

surfaces during the initial steps in inflammation through interaction with PSGL1.

Tissue specificity Stored in the alpha-granules of platelets and Weibel-Palade bodies of endothelial cells. Upon cell

activation by agonists, P-selectin is transported rapidly to the cell surface.

Involvement in diseaseDefects in SELP may be a cause of susceptibility to ischemic stroke (ISCHSTR) [MIM:601367];

also known as cerebrovascular accident or cerebral infarction. A stroke is an acute neurologic event leading to death of neural tissue of the brain and resulting in loss of motor, sensory and/or cognitive function. Ischemic strokes, resulting from vascular occlusion, is considered to be a highly complex disease consisting of a group of heterogeneous disorders with multiple genetic and

environmental risk factors.

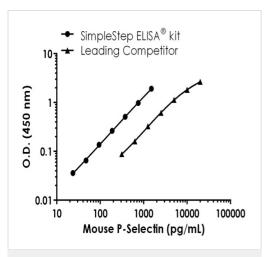
Sequence similarities Belongs to the selectin/LECAM family.

Contains 1 C-type lectin domain.
Contains 1 EGF-like domain.

Contains 9 Sushi (CCP/SCR) domains.

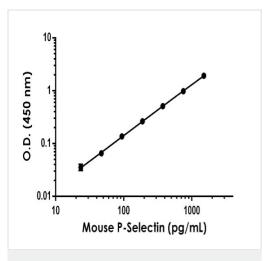
Cellular localization Membrane.

Images



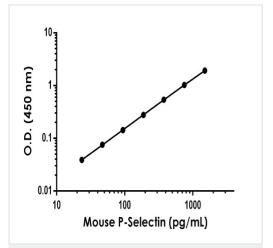
Mouse P-Selectin (CD62P) standard curve comparison data.

Standard curve comparison between mouse P-Selectin (CD62P) SimpleStep ELISA $^{\circledR}$ kit and traditional ELISA kit from leading competitor. SimpleStep ELISA kit shows a 4-fold increase in sensitivity.



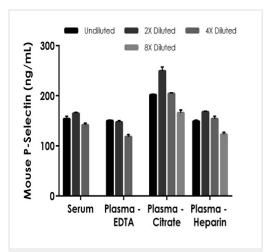
Example of P-Selectin standard curve in Sample Diluent NS.

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

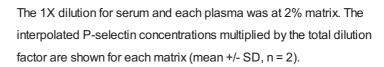


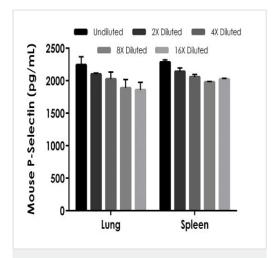
Example of P-Selectin standard curve in 1X Cell Extraction Buffer PTR.

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



Titration of mouse serum, EDTA platelet poor plasma, citrate plasma, and heparin plasma within the working range of the assay.





Titration of lung and spleen extracts in 1X Cell Extraction Buffer PTR within the working range of the assay.

The 1X dilution for the lung extracts was 500 μ g/mL, and for the spleen extracts 125 μ g/mL. The interpolated P-Selectin concentrations multiplied by the total dilution factor are shown for each supernatant (mean +/- SD, n = 2).



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.

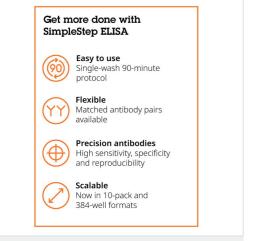
Sandwich ELISA - Mouse P-Selectin ELISA Kit (CD62P) (ab200014)



Sandwich ELISA - Mouse P-Selectin ELISA Kit

(CD62P) (ab200014)

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



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

Sandwich ELISA - Mouse P-Selectin ELISA Kit (CD62P) (ab200014)

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