abcam

Product datasheet

Mouse Calreticulin ELISA Kit ab284624

Recombinant SimpleStep ELISA

5 Images

Overview

Product name Mouse Calreticulin ELISA Kit

Detection method Colorimetric

Precision Intra-assay

Sample	n	Mean	SD	CV%
Extract	8			5%

Inter-assay

Sample	n	Mean	SD	CV%	
Extract	3			6%	

Sample type Cell Lysate

Assay type Sandwich (quantitative)

Sensitivity 49 pg/ml

Range 140.6 pg/ml - 9000 pg/ml

Recovery Sample specific recovery

Sample type	Average %	Range
Cell Lysate	96	86% - 119%

Assay time 1h 30m

Assay duration One step assay

Species reactivity Reacts with: Mouse

Product overview Mouse Calreticulin ELISA kit (ab284624) is a single-wash 90 min sandwich ELISA designed for

> the quantitative measurement of Mouse Calreticulin protein in mouse cell and tissue extract samples. It uses our proprietary SimpleStep ELISA® technology. Quantitate Mouse Calreticulin

with 49 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.

Notes

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

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 Calreticulin Capture Antibody	1 x 600µl
10X Mouse Calreticulin 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
Antibody Diluent CPI - HAMA Blocker (ab193969)	1 x 6ml
Mouse Calreticulin Lyophilized Recombinant Protein	2 vials
Plate Seals	1 unit
Sample Diluent NS (ab193972)	1 x 12ml
SimpleStep Pre-Coated 96-Well Microplate (ab206978)	1 unit
Stop Solution	1 x 12ml
TMB Development Solution	1 x 12ml

Function

Molecular calcium-binding chaperone promoting folding, oligomeric assembly and quality control

in the ER via the calreticulin/calnexin cycle. This lectin interacts transiently with almost all of the monoglucosylated glycoproteins that are synthesized in the ER. Interacts with the DNA-binding domain of NR3C1 and mediates its nuclear export.

Sequence similarities

Belongs to the calreticulin family.

Domain

Can be divided into a N-terminal globular domain, a proline-rich P-domain forming an elongated arm-like structure and a C-terminal acidic domain. The P-domain binds one molecule of calcium with high affinity, whereas the acidic C-domain binds multiple calcium ions with low affinity. The interaction with glycans occurs through a binding site in the globular lectin domain.

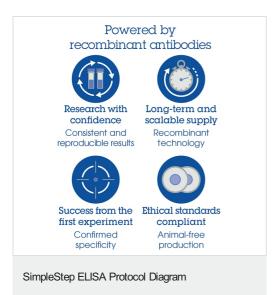
The zinc binding sites are localized to the N-domain.

Associates with PDIA3 through the tip of the extended arm formed by the P-domain.

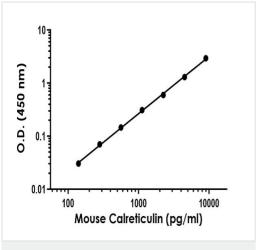
Cellular localization

Endoplasmic reticulum lumen. Cytoplasm > cytosol. Secreted > extracellular space > extracellular matrix. Cell surface. Also found in cell surface (T cells), cytosol and extracellular matrix. Associated with the lytic granules in the cytolytic T-lymphocytes.

Images

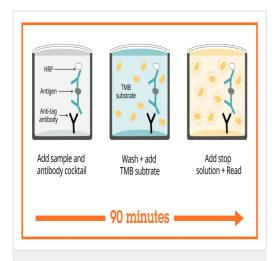


To learn more about the advantages of recombinant antibodies see **here**.



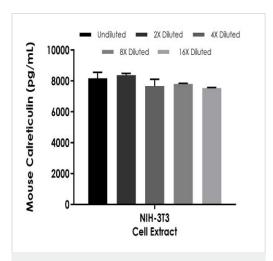
Example of mouse Calreticulin standard curve in 1X Cell Extraction Buffer PTR.

Example of mouse Calreticulin standard curve. Backgroundsubtracted data values (mean +/- SD) are graphed.



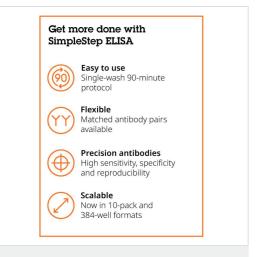
Sandwich ELISA - Mouse Calreticulin ELISA Kit (ab284624)

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.



Interpolated concentrations of mouse Calreticulin in NIH3T3 cell extract.

Interpolated concentration of native Calreticulin was measured in duplicate at different sample concentrations. Undiluted samples are 200 ug/mL. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). Sample dilutions are made in 1X Cell Extraction Buffer PTR.



Sandwich ELISA - Mouse Calreticulin ELISA Kit (ab284624)

To learn more about the advantages of SimpleStep $\mathsf{ELISA}^{\$}$ kits see **here**.

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