# abcam

### Product datasheet

# Mouse Nidogen-1 ELISA Kit (Entactin) ab270203

Recombinant SimpleStep ELISA

## 6 Images

#### Overview

**Product name** 

Mouse Nidogen-1 ELISA Kit (Entactin)

**Detection method** 

Colorimetric

**Precision** 

Intra-assay

Sample	n	Mean	SD	CV%	
Serum	8			5.4%	

Inter-assay

Sample	n	Mean	SD	CV%
Serum	3			6.5%

Sample type

Cell culture supernatant, Serum, Cell culture media, Hep Plasma, EDTA Plasma, Cit plasma

Assay type

Sandwich (quantitative)

Sensitivity

44.15 pg/ml

Range

78.13 pg/ml - 5000 pg/ml

Recovery

Sample specific recovery

Sample type	Average %	Range
Cell culture supernatant	107	105% - 110%
Serum	89	81% - 103%
Cell culture media	97	96% - 98%
Hep Plasma	92	87% - 100%
EDTA Plasma	93	89% - 97%
Cit plasma	85	83% - 87%

Assay time 1h 30m

**Assay duration** One step assay

Species reactivity Reacts with: Mouse

**Product overview** Mouse Nidogen-1 ELISA Kit (Entactin) (ab270203) is a single-wash 90 min sandwich ELISA

designed for the quantitative measurement of Nidogen-1 (Entactin) protein in cell culture media, cell culture supernatant, edta plasma, serum, cit plasma, and hep plasma. It uses our proprietary SimpleStep ELISA® technology. Quantitate Mouse Nidogen-1 (Entactin) with 44.15 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 (ab203359) is available to use as an alternative to the

96-well microplate provided with SimpleStep ELISA® kits.

Nidogen-1 is a glycoprotein found in the basement membrane. Nidogen-1 is a part of a network of proteins within the cell and is thought to be involved in cell-extracellular matrix interactions. Nidogen-1 is a ubiquitous and abundant protein, in contrast to nidogen-2 which has distinct expression patterns. Mice lacking both nidogens die shortly after birth due to lung and heart

problems.

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

#### **Properties**

**Notes** 

#### Storage instructions

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

Components	1 x 96 tests
10X Mouse Nidogen-1 (Entactin) Capture Antibody	1 x 600µl
10X Mouse Nidogen-1 (Entactin) Detector Antibody	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml
Antibody Diluent 4BR	1 x 6ml
Mouse Nidogen-1 (Entactin) Lyophilized Recombinant Protein	2 vials
Plate Seals	1 unit

Components	1 x 96 tests
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 Sulfated glycoprotein widely distributed in basement membranes and tightly associated with

laminin. Also binds to collagen IV and perlecan. It probably has a role in cell-extracellular matrix

interactions.

Sequence similarities Contains 6 EGF-like domains.

Contains 4 LDL-receptor class B repeats.

Contains 1 NIDO domain.

Contains 1 nidogen G2 beta-barrel domain. Contains 1 thyroglobulin type-1 domain.

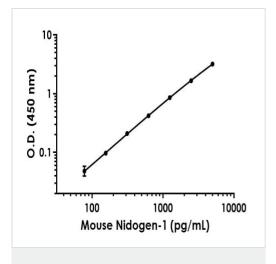
Post-translational modifications

N- and O-glycosylated.

**Cellular localization** 

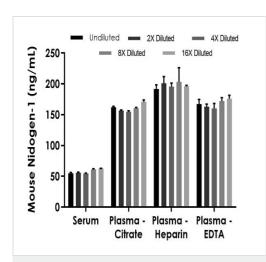
Secreted > extracellular space > extracellular matrix > basement membrane.

#### **Images**



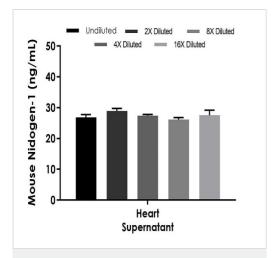
Example of mouse Nidogen-1 standard curve in Sample Diluent NS.

The Nidogen-1 standard curve was prepared as described in Section 10. Raw data values are shown in the table. Background-subtracted data values (mean +/- SD) are graphed.



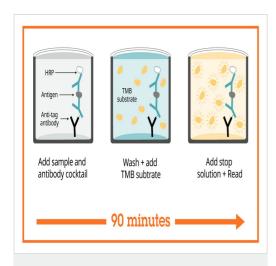
Interpolated concentrations of native Nidogen-1 in mouse serum and plasma samples.

The concentrations of Nidogen-1 were measured in duplicates, interpolated from the Nidogen-1 standard curves and corrected for sample dilution. Undiluted samples are as follows: serum 5%, plasma (citrate) 2.5%, plasma (heparin) 2.5%, and plasma (EDTA) 2.5%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean Nidogen-1 concentration was determined to be 59.56 ng/mL in serum, 165.19 ng/mL in plasma (citrate), 199.81 ng/ml in plasma (heparin), and 167.56 ng/ml in plasma (EDTA).



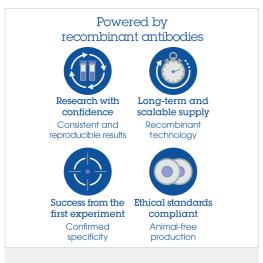
Interpolated concentrations of native Nidogen-1 in mouse heart tissue supernatant samples.

The concentrations of Nidogen-1 were measured in duplicates, interpolated from the Nidogen-1 standard curves and corrected for sample dilution. Undiluted samples are as follows: heart supernatant 12.5%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean Nidogen-1 concentration was determined to be 27.66 ng/mL in heart supernatant.



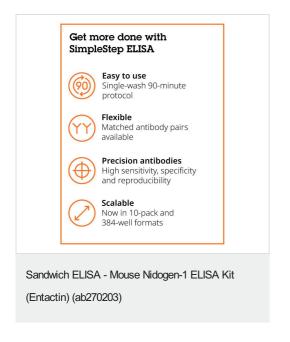
SimpleStep ELISA technology allows the formation of the antibodyantigen complex in one single step, reducing assay time to 90 minutes. Add samples or standards and antibody mix to wells all at once, incubate, wash, and add your final substrate. See protocol for a detailed step-by-step guide.

Sandwich ELISA - Mouse Nidogen-1 ELISA Kit (Entactin) (ab270203)



To learn more about the advantages of recombinant antibodies see <a href="here">here</a>.

Sandwich ELISA - Mouse Nidogen-1 ELISA Kit (Entactin) (ab270203)



To learn more about the advantages of SimpleStep ELISA<sup>®</sup> kits see <u>here</u>.

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