

Human iNOS ELISA Kit ab253217

Recombinant SimpleStep ELISA®

[6 References](#) [5 Images](#)

Overview

Product name Human iNOS ELISA Kit

Detection method Colorimetric

Precision

Intra-assay

Sample	n	Mean	SD	CV%
Extract	8			3.3%

Sample type

Cell Lysate

Assay type

Sandwich (quantitative)

Sensitivity

18 pg/ml

Range

46.88 pg/ml - 3000 pg/ml

Recovery

Sample specific recovery

Sample type	Average %	Range
Cell Lysate	95	% - %

Assay time

1h 30m

Assay duration

One step assay

Species reactivity

Reacts with: Human

Product overview

Human iNOS ELISA Kit (ab253217) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of iNOS protein in cell lysate. It uses our proprietary SimpleStep ELISA® technology. Quantitate Human iNOS with 18 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 iNOS, also known as NOS2, catalyzes the production of nitric oxide from L-arginine, which is used in various cell signaling events. iNOS is an inducible member of the NOS family and is upregulated as a host-defense mechanism during proinflammatory cytokine activity seen with tumorigenesis and parasitic infection. iNOS activity is a key cause of septic shock.

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 Human iNOS Capture Antibody	1 x 600µl
10X Human iNOS 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
Human iNOS 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 Produces nitric oxide (NO) which is a messenger molecule with diverse functions throughout the body. In macrophages, NO mediates tumoricidal and bactericidal actions. Also has nitrosylase activity and mediates cysteine S-nitrosylation of cytoplasmic target proteins such COX2.

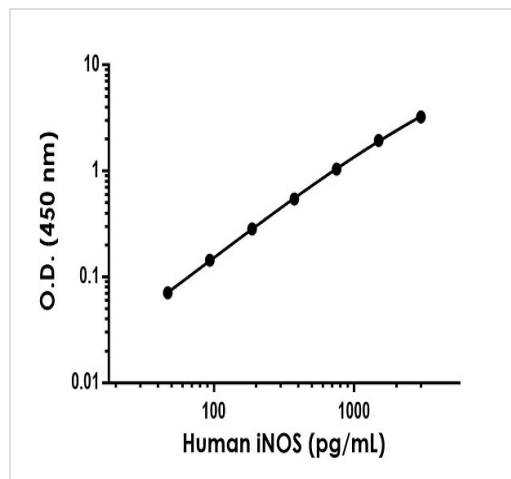
Tissue specificity

Expressed in the liver, retina, bone cells and airway epithelial cells of the lung. Not expressed in the platelets.

Sequence similarities

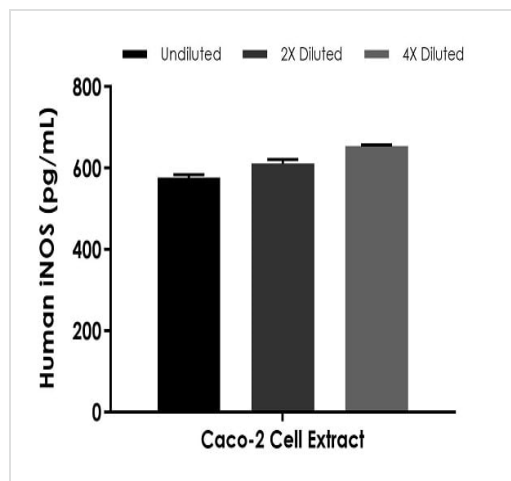
Belongs to the NOS family.
Contains 1 FAD-binding FR-type domain.
Contains 1 flavodoxin-like domain.

Images



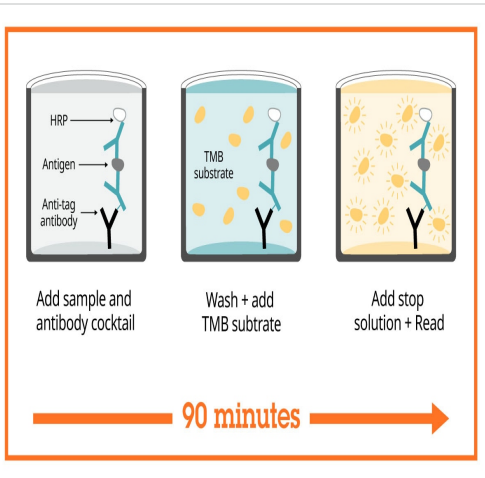
Example of human iNOS standard curve in 1X Cell Extraction Buffer PTR.

The iNOS 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 iNOS in Caco-2 cell extract samples based on an 800 µg/mL extract load.

The concentrations of iNOS were measured in duplicate and interpolated from the iNOS standard curve and corrected for sample dilution. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean iNOS concentration was determined to be 613.7 pg/mL in Caco-2 cell extract samples.



Sandwich ELISA - Human iNOS ELISA Kit
(ab253217)

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

 <p>Research with confidence Consistent and reproducible results</p>	 <p>Long-term and scalable supply Recombinant technology</p>
 <p>Success from the first experiment Confirmed specificity</p>	 <p>Ethical standards compliant Animal-free production</p>

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(ab253217)

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

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

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