

## Product datasheet

### Mouse GDH ELISA Kit ab246532

Recombinant SimpleStep ELISA<sup>®</sup>

[6 Images](#)

#### Overview

**Product name** Mouse GDH ELISA Kit

**Detection method** Colorimetric

#### Precision

Intra-assay

Sample	n	Mean	SD	CV%
Extract	8			3.8%

Inter-assay

Sample	n	Mean	SD	CV%
Extract	3			3.3%

**Sample type**

Serum, Cell culture extracts, Tissue Extracts, Hep Plasma, Cit plasma

**Assay type**

Sandwich (quantitative)

**Sensitivity**

60 pg/ml

**Range**

0.313 ng/ml - 30 ng/ml

#### Recovery

Sample specific recovery

Sample type	Average %	Range
Serum	116	108% - 128%
Cell culture extracts	94	90% - 98%
Tissue Extracts	107	102% - 112%
Hep Plasma	98	92% - 102%
Cit plasma	89	87% - 93%

**Assay time**

1h 30m

**Assay duration**

One step assay

**Species reactivity****Reacts with:** Mouse**Product overview**

Mouse GDH ELISA Kit (ab246532) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of GDH protein in cit plasma, hep plasma, serum, tissue extracts, and cell culture extracts. It uses our proprietary SimpleStep ELISA® technology. Quantitate Mouse GDH with 60 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**

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**

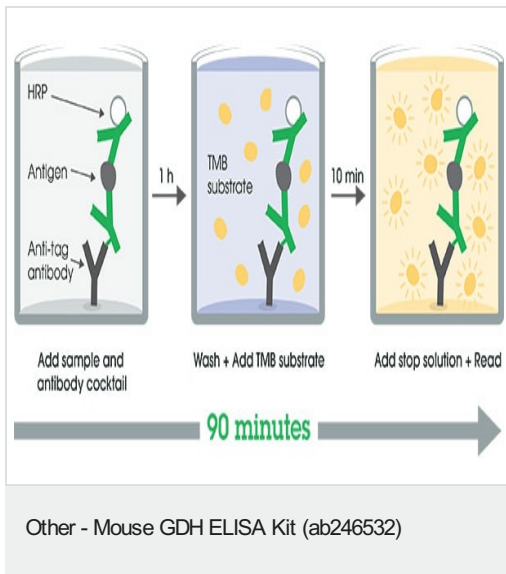
Store at +4°C. Please refer to protocols.

Components	1 x 96 tests
10X Mouse GDH Capture Antibody	1 x 600µl
10X Mouse GDH 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 CPR2	1 x 6ml
Mouse GDH Lyophilized Recombinant Protein	2 vials
Plate Seals	1 unit

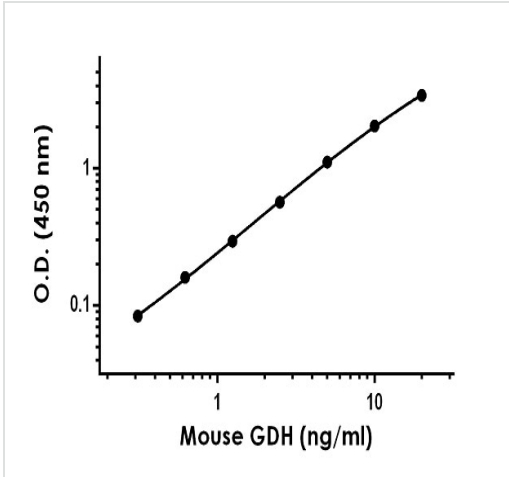
Components	1 x 96 tests
Sample Diluent NS (ab193972)	1 x 12ml
SimpleStep Pre-Coated 96-Well Microplate (ab206978)	1 unit
Stop Solution	1 x 12ml
TMB Development Solution	1 x 12ml

<b>Function</b>	Oxidizes glucose-6-phosphate and glucose, as well as other hexose-6-phosphates.
<b>Tissue specificity</b>	Present in most tissues examined, strongest in liver.
<b>Involvement in disease</b>	Defects in H6PD are a cause of cortisone reductase deficiency (CRD) [MIM:604931]. In CRD, activation of cortisone to cortisol does not occur, resulting in adrenocorticotropin-mediated androgen excess and a phenotype resembling polycystic ovary syndrome (PCOS).
<b>Sequence similarities</b>	In the N-terminal section; belongs to the glucose-6-phosphate dehydrogenase family. In the C-terminal section; belongs to the glucosamine/galactosamine-6-phosphate isomerase family. 6-phosphogluconolactonase subfamily.
<b>Cellular localization</b>	Endoplasmic reticulum lumen. Microsomes, endoplasmic reticulum lumen.

## Images

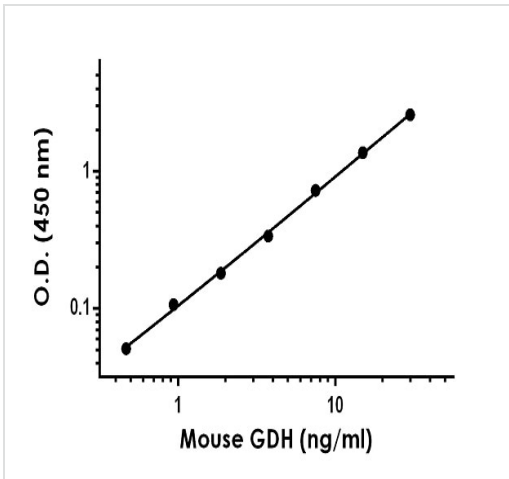


SimpleStep ELISA technology allows the formation of the antibody-antigen complex in one single step, reducing assay time to 90 minutes. Add samples or standards and antibody mix to wells all at once, incubate, wash, and add your final substrate. See protocol for a detailed step-by-step guide.



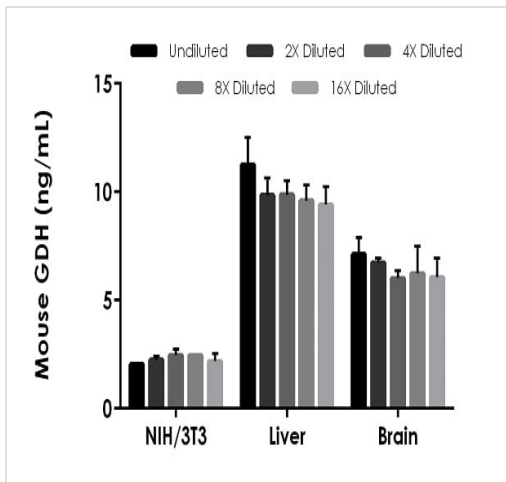
Example of mouse GDH standard curve in 1X Cell Extraction Buffer PTR.

The GDH 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.



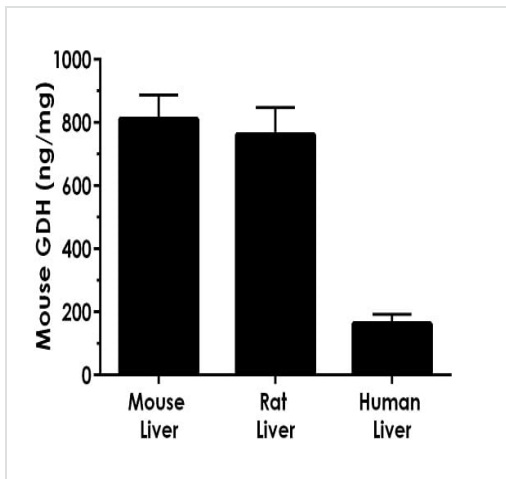
Example of mouse GDH standard curve in Sample Diluent NS.

The GDH 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 GDH in mouse cell and tissue extracts.

Interpolated concentrations of native GDH in mouse NIH/3T3 cell extract based on a 250  $\mu\text{g/mL}$  extract load, mouse liver tissue extract based on a 20  $\mu\text{g/mL}$  extract load, and mouse brain tissue extract based on a 50  $\mu\text{g/mL}$  extract load. The concentrations of GDH were measured in duplicate and interpolated from the GDH standard curve and corrected for sample dilution. The interpolated dilution factor corrected values are plotted (mean  $\pm$  SD,  $n=2$ ). The mean GDH concentration was determined to be 1.940 ng/mL in NIH/3T3 cell extract, 8.822 ng/mL in liver tissue extract, and 5.428 ng/mL in brain tissue extract.



Other species reactivity was determined by measuring liver tissue extract samples of various species.

Other species reactivity was determined by measuring liver tissue extract samples of various species, interpolating the protein concentrations from the mouse standard curve, and expressing the interpolated concentrations in ng of GDH protein per mg of extract. The mean GDH concentration was determined to be 811.1 ng/mg in mouse liver extract, 762.4 ng/mg in rat liver extract, and 163.0 ng/mg in human liver extract.

Powered by  
recombinant antibodies



**Research with confidence**  
Consistent and reproducible results

**Long-term and scalable supply**  
Recombinant technology

**Success from the first experiment**  
Confirmed specificity

**Ethical standards compliant**  
Animal-free production

Sandwich ELISA - Mouse GDH ELISA Kit  
(ab246532)

To learn more about the advantages of recombinant antibodies see [here](#).

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

### Our Abpromise to you: Quality guaranteed and expert technical support

---

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

### Terms and conditions

---

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors