# abcam

### Product datasheet

## Mouse UCHL1 ELISA Kit ab235641

Recombinant SimpleStep ELISA

★★★★ 1 Abreviews 5 Images

Overview

**Product name** Mouse UCHL1 ELISA Kit

**Detection method** Colorimetric

Precision Intra-assay

Sample	n	Mean	SD	CV%
Ms Brain Ext	9			3.5%

Inter-assay

Sample	n	Mean	SD	CV%	
Ms Brain Ext	3			10.8%	

Sample type Cell culture extracts, Tissue Extracts

Sandwich (quantitative) Assay type

Sensitivity 7.2 pg/ml

156.3 pg/ml - 10000 pg/ml Range

Recovery Sample specific recovery

Sample type	Average %	Range
Cell culture extracts	110	109% - 110%
Tissue Extracts	108	107% - 108%

Assay time 1h 30m

**Assay duration** One step assay

Species reactivity Reacts with: Mouse

**Product overview** Mouse UCHL1 ELISA Kit (ab235641) is a single-wash 90 min sandwich ELISA designed for the

> quantitative measurement of UCHL1 protein in cell culture extracts and tissue extracts. It uses our proprietary SimpleStep ELISA® technology. Quantitate Mouse UCHL1 with 7.2 pg/ml sensitivity.

> > 1

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	1 x 96 tests
10X Mouse/Rat UCHL1 Capture Antibody	1 x 600µl	1 x 600µl
10X Mouse/Rat UCHL1 Detector Antibody	1 x 600µl	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml	1 x 20ml
50X Cell Extraction Enhancer Solution (ab193971)	1 x 1ml	1 x 1ml
5X Cell Extraction Buffer PTR (ab193970)	1 x 10ml	1 x 10ml
Antibody Diluent CPI2	1 x 6ml	1 x 6ml
Mouse/Rat UCHL1 Lyophilized Recombinant Protein	2 vials	2 vials
Plate Seals	1 unit	1 unit
Sample Diluent NS (ab193972)	1 x 12ml	1 x 12ml
SimpleStep Pre-Coated 96-Well Microplate (ab206978)	1 unit	1 unit
Stop Solution	1 x 12ml	1 x 12ml
TMB Development Solution	1 x 12ml	1 x 12ml

**Function** Ubiquitin-protein hydrolase involved both in the processing of ubiquitin precursors and of

ubiquitinated proteins. This enzyme is a thiol protease that recognizes and hydrolyzes a peptide bond at the C-terminal glycine of ubiquitin. Also binds to free monoubiquitin and may prevent its degradation in lysosomes. The homodimer may have ATP-independent ubiquitin ligase activity.

**Tissue specificity** Found in neuronal cell bodies and processes throughout the neocortex (at protein level).

Expressed in neurons and cells of the diffuse neuroendocrine system and their tumors. Weakly expressed in ovary. Down-regulated in brains from Parkinson disease and Alzheimer disease

patients.

**Involvement in disease** Parkinson disease 5

Neurodegeneration with optic atrophy, childhood-onset

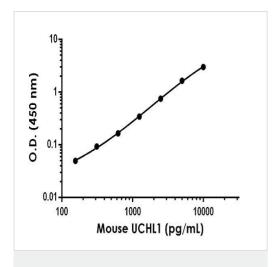
**Sequence similarities**Belongs to the peptidase C12 family.

**Post-translational** O-glycosylated. **modifications** 

Cellular localization Cytoplasm. Endoplasmic reticulum membrane. About 30% of total UCHL1 is associated with

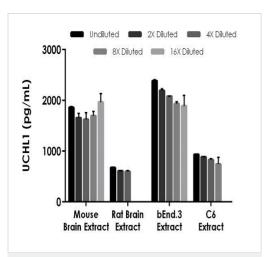
membranes in brain.

#### **Images**



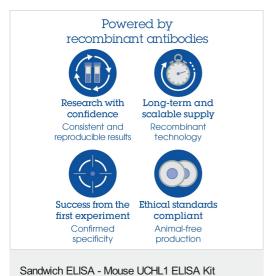
Example of mouse/rat UCHL1 standard curve in 1X Cell Extraction Buffer PTR.

The UCHL1 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.



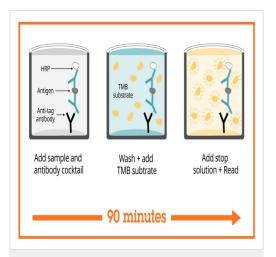
Interpolated concentrations of native UCHL1 in mouse brain extract, rat brain extract, bEnd.3 cell extract (mouse), and C6 cell extract (rat) samples.

The concentrations of UCHL1 were measured in duplicates, interpolated from the UCHL1 standard curves and corrected for sample dilution. Undiluted samples are as follows: mouse brain extract 2,500 ng/mL, rat brain extract 625 ng/mL, bEnd.3 extract 250  $\mu$ g/mL, and C6 extract 3,750 ng/mL. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2).



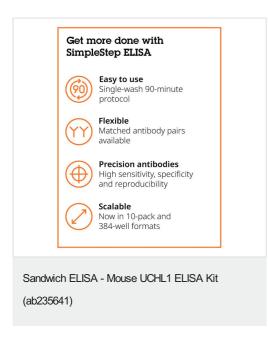
(ab235641)

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



Sandwich ELISA - Mouse UCHL1 ELISA Kit (ab235641)

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.



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

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