# abcam

### Product datasheet

## Calretinin ELISA Kit ab233616

Recombinant SimpleStep ELISA

6 Images

Overview

**Product name** Calretinin ELISA Kit

**Detection method** Colorimetric

**Precision** Intra-assay

Sample	n	Mean	SD	CV%
Brain	6			4.5%

Inter-assay

Sample	n	Mean	SD	CV%
Brain	3			10.5%

Sample type Milk, Tissue Extracts, Mouse brain extract

Assay type Sandwich (quantitative)

Sensitivity 4.2 pg/ml

234 pg/ml - 15000 pg/ml Range

Recovery Sample specific recovery

Sample type	Average %	Range
Milk	111	103% - 115%
Tissue Extracts	107	98% - 114%
Mouse brain extract	106	97% - 115%

Assay time 1h 30m

**Assay duration** One step assay

**Species reactivity** Reacts with: Mouse, Rat, Human

**Product overview** Calretinin ELISA Kit (ab233616) is a single-wash 90 min sandwich ELISA designed for the

quantitative measurement of Calretinin protein in milk, mouse brain extract, and tissue extracts. It

uses our proprietary SimpleStep ELISA® technology. Quantitate Calretinin with 4.2 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 Calretinin Capture Antibody	1 x 600µl
10X Calretinin 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 5BR	1 x 6ml
Calretinin 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

Components	1 x 96 tests
Stop Solution	1 x 12ml
TMB Development Solution	1 x 12ml

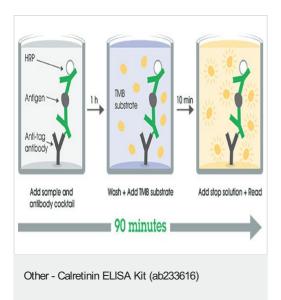
**Function** Calretinin is a calcium-binding protein which is abundant in auditory neurons.

Tissue specificity Brain.

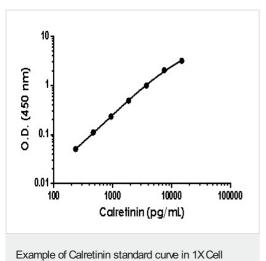
Sequence similarities Belongs to the calbindin family.

Contains 6 EF-hand domains.

#### **Images**

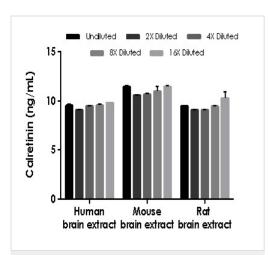


SimpleStep ELISA technology allows the formation of the antibodyantigen complex in one single step, reducing assay time to 90 minutes. Add samples or standards and antibody mix to wells all at once, incubate, wash, and add your final substrate. See protocol for a detailed step-by-step guide.



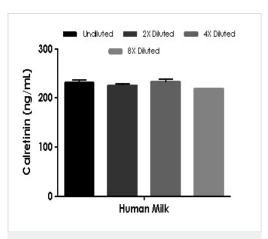
The Calretinin standard curve was prepared as described in Section 10.

Extraction Buffer PTR.



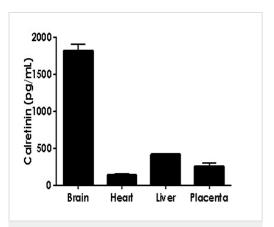
The concentrations of Calretinin were measured in duplicates, interpolated from the Calretinin standard curves and corrected for sample dilution. Undiluted samples are as follows: brain extract 12.5 µg/mL. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2).

Interpolated concentrations of native Calretinin in human, mouse, and rat brain extract samples.



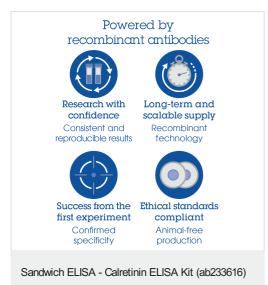
The concentrations of Calretinin were measured in duplicates, interpolated from the Calretinin standard curves and corrected for sample dilution. Undiluted samples are as follows: milk 1.25%. The interpolated dilution factor corrected values are plotted (mean +/-SD, n=2). The mean Calretinin concentration was determined to be 227 ng/mL in neat human breast milk.

Interpolated concentrations of native Calretinin in human breast milk samples.



Relative expression of calretinin in normal tissue extracts

Calretinin expression in non-neural and non-malignant tissues are expected to be significantly lower than neural tissues. Interpolated concentrations of native Calretinin in human brain, heart, liver, and placenta extract samples. The concentrations of Calretinin were measured in duplicates, interpolated from the Calretinin standard curves and corrected for sample dilution. Undiluted samples are as follows: brain extract 3  $\mu$ g/mL, heart, liver, and placenta extract 100  $\mu$ g/mL. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2).



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

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