abcam

Product datasheet

Mouse/Rat Bcl-xL ELISA Kit ab227899

Recombinant SimpleStep ELISA

3 References 6 Images

Overview

Product name Mouse/Rat Bcl-xL ELISA Kit

Detection method Colorimetric

Precision Intra-assav

Sample	n	Mean	SD	CV%
L929	3			5.7%

Inter-assay

Sample	n	Mean	SD	CV%
L929	5			9.1%

Sample type Cell culture extracts, Tissue Extracts

Assay type Sandwich (quantitative)

Sensitivity 28 pg/ml

0.19 pg/ml - 12 pg/ml Range

Recovery Sample specific recovery

Sample type	Average %	Range
Cell culture extracts	83	81% - 86%
Mouse brain extract	105	94% - 111%

Assay time 1h 30m

Assay duration One step assay

Species reactivity Reacts with: Mouse, Rat

Product overview Mouse/Rat Bcl-xL ELISA Kit (ab227899) is a single-wash 90 min sandwich ELISA designed for

> the quantitative measurement of Bcl-xL protein in cell culture extracts and tissue extracts. It uses our proprietary SimpleStep ELISA® technology. Quantitate Mouse/Rat Bcl-xL with 28 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
10X Mouse/Rat Bcl-xL Capture Antibody	1 x 600µl
10X Mouse/Rat Bcl-xL 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
Mouse/Rat Bcl-xL 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 Potent inhibitor of cell death. Inhibits activation of caspases (By similarity). Appears to regulate

cell death by blocking the voltage-dependent anion channnel (VDAC) by binding to it and preventing the release of the caspase activator, CYC1, from the mitochondrial membrane.

Isoform Bcl-X(S) promotes apoptosis.

Tissue specificity Bcl-X(S) is expressed at high levels in cells that undergo a high rate of turnover, such as

developing lymphocytes. In contrast, Bcl-X(L) is found in tissues containing long-lived postmitotic

cells, such as adult brain.

Sequence similarities Belongs to the Bcl-2 family.

Domain The BH4 motif is required for anti-apoptotic activity. The BH1 and BH2 motifs are required for

both heterodimerization with other Bcl-2 family members and for repression of cell death.

Post-translational Proteolytically cleaved by caspases during apoptosis. The cleaved protein, lacking the BH4 motif,

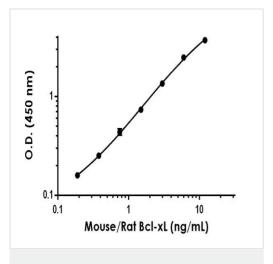
has pro-apoptotic activity.

Cellular localization Mitochondrion membrane. Nucleus membrane. Mitochondrial membranes and perinuclear

envelope.

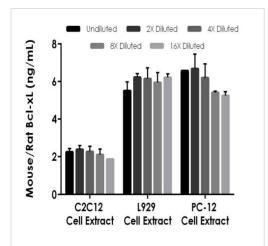
Images

modifications

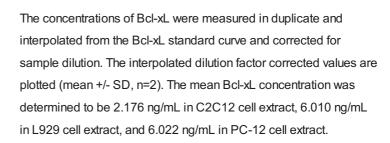


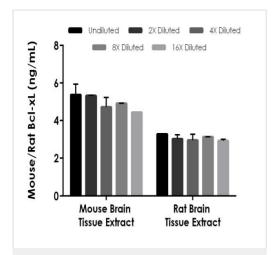
Example of mouse/rat Bcl-xL standard curve in 1X Cell Extraction Buffer PTR

Background-subtracted data values (mean +/- SD) are graphed.



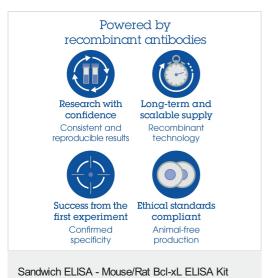
Interpolated concentrations of native Bcl-xL in C2C12 cell extract, L929 cell extract based on a 300 µg/mL extract load, and PC-12 cell extract samples based on a 150 µg/mL extract load





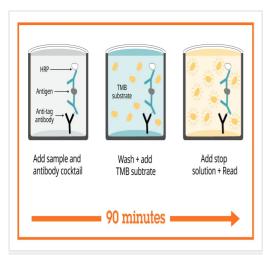
Interpolated concentrations of native Bcl-xL in mouse and rat brain tissue extract samples based on a 300 μ g/mL extract load

The concentrations of Bcl-xL were measured in duplicate and interpolated from the Bcl-xL standard curve and corrected for sample dilution. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean Bcl-xL concentration was determined to be 4.957 ng/mL in mouse brain tissue extract, and 3.067 ng/mL in rat brain tissue extract.



(ab227899)

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



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/Rat Bcl-xL ELISA Kit (ab227899)



To learn more about the advantages of SimpleStep $\mathsf{ELISA}^{@}$ kits see $\underline{\mathsf{here}}$.

Sandwich ELISA - Mouse/Rat Bcl-xL ELISA Kit (ab227899)

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