abcam

Product datasheet

Mouse c-Kit ELISA Kit (CD117) ab203361

Recombinant SimpleStep ELISA

7 Images

Overview

Product name

Mouse c-Kit ELISA Kit (CD117)

Detection method

Colorimetric

Precision

SD CV% Sample Mean n

Overall 5 2.6%

Inter-assay

Intra-assay

Sample	n	Mean	SD	CV%
Overall	3			5.4%

Cell culture supernatant, Serum, Cell culture extracts, Tissue Extracts, Hep Plasma, EDTA Sample type

Plasma, Cit plasma

Assay type Sandwich (quantitative)

Sensitivity 30 pg/ml

Range 0.23 ng/ml - 15 ng/ml

Recovery

Sample specific recovery

Sample type	Average %	Range
Cell culture supernatant	94	92% - 94%
Serum	118	115% - 120%
Hep Plasma	109	104% - 114%
EDTA Plasma	105	93% - 144%
Cit plasma	110	103% - 119%
Mouse brain extract	104	103% - 106%

Assay time 1h 30m

Assay duration One step assay

Species reactivity Reacts with: Mouse

Does not react with: Sheep, Goat, Cow, Pig

Product overview

Mouse c-Kit ELISA Kit (CD117) (ab203361) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of c-Kit (CD117) protein in cell culture extracts, cell culture supernatant, cit plasma, edta plasma, hep plasma, serum, and tissue extracts. It uses our proprietary SimpleStep ELISA® technology. Quantitate Mouse c-Kit (CD117) with 30 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.

c-Kit (CD117) is a member of the type III subfamily of receptor tyrosine kinases and is the cellular receptor for stem cell factor. Kit is essential for cell survival and proliferation, stem cell maintenance, mast cell development, melanogenesis, cellular migration, hematopoiesis, and gametogenesis. Mutations in human c-Kit are associated with gastrointestional stromal tumors, piebaldism, acute myelogenous leukemia, and mast cell disease.

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 Microplate (12 x 8 well strips)

Properties

Storage instructions

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

10X Mouse c-Kit Capture Antibody	1 x 600µl
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10X Mouse c-Kit Detector Antibody	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml

Notes

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Components	1 x 96 tests
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
Mouse C-Kit Lyophilized Recombinant Protein	2 vials
Plate Seals	1 unit
Sample Diluent NS (ab193972)	1 x 50ml
SimpleStep Pre-Coated 96-Well Microplate (ab206978)	1 unit
Stop Solution	1 x 12ml
TMB Development Solution	1 x 12ml

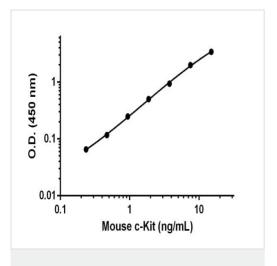
Relevance

KIT encodes the human homolog of the proto-oncogene c-kit. c-kit was first identified as the cellular homolog of the feline sarcoma viral oncogene v-kit. KIT is a type 3 transmembrane receptor for MGF (mast cell growth factor, also known as stem cell factor). Mutations in KIT are associated with gastrointestinal stromal tumors, mast cell disease, acute myelogenous lukemia, and piebaldism.

Cellular localization

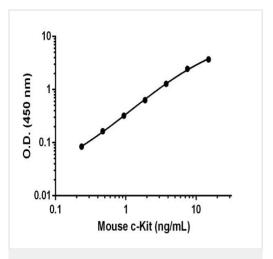
Cell Membrane; single-pass type I membrane protein

Images

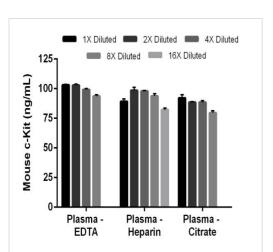


Example of c-KIT standard curve prepared in Sample Diluent NS.

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



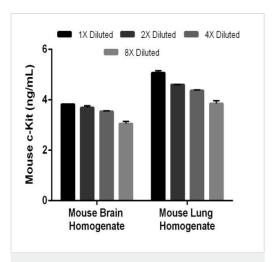
Example of c-KIT standard curve prepared in 1X Cell Extraction buffer PTR.



Interpolated concentrations of c-Kit in mouse plasma (EDTA, heparin and citrate).

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

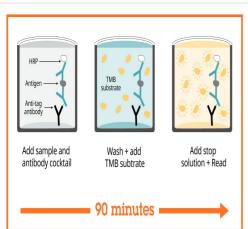
The concentrations of c-Kit were measured in duplicate and interpolated from the c-Kit standard curve and corrected for sample dilution. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2).



Interpolated concentrations of c-Kit in mouse brain

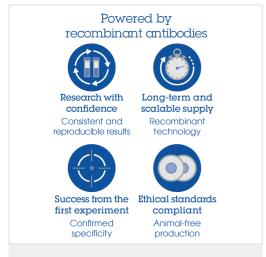
and lung extract.

The concentrations of c-Kit were measured in duplicate and interpolated from the c-Kit standard curve and corrected for sample dilution. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). Interpolated values of c-Kit are plotted based on an extract load of 200 µg/mL.



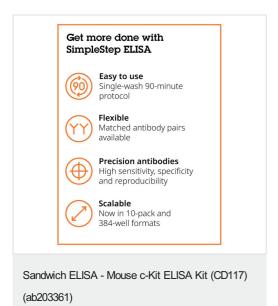
Sandwich ELISA - Mouse c-Kit ELISA Kit (CD117) (ab203361)

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 c-Kit ELISA Kit (CD117) (ab203361)

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



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

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