abcam

Product datasheet

Mouse Pin1 ELISA Kit ab209879

Recombinant SimpleStep ELISA

6 Images

Overview						
Product name	Mouse Pin1 ELISA Kit					
Detection method	Colorimetric					
Precision	Intra-assay					
	Sample	n	Mean	SD	CV%	
	cell extract	8			3.7%	
					Inter-assay	
	Sample	n	Mean	SD	CV%	
	cell extract	3			3.5%	
Sample type	Cell culture extracts, Tissue E	xtracts				
Assay type	Sandwich (quantitative)					
Sensitivity	11.2 pg/ml					
Range	46.9 pg/ml - 3000 pg/ml					
Recovery	Sample specific recovery					
	Sample type		Average % Ra		ange	
	Cell culture extracts		105 94		% - 111%	
Assay time	1h 30m					
Assay duration	One step assay					
Species reactivity	Reacts with: Mouse					
Product overview	Mouse Pin1 ELISA Kit (ab209879) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of Pin1 protein in cell culture extracts and tissue extracts. It uses our proprietary SimpleStep ELISA® technology. Quantitate Mouse Pin1 with 11.2 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

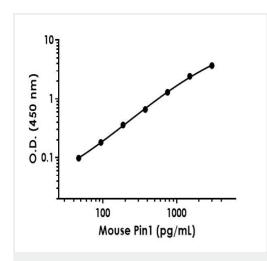
	approach to sandwich ELISA allows the formation of the antibody-analyte sandwich complex in a single step, significantly reducing assay time. See the SimpleStep ELISA® protocol summary in the image section for further details. Our SimpleStep ELISA® technology provides several benefits:
	 Single-wash 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	Pin1 is a peptidyl-prolyl cis/trans isomerase, isomerizing specific phosphorylated Ser/Thr-Pro motifs present in some proteins. Pin1 is involved in the regulation of mitosis, and it can transactivate multiple oncogenes and induce centrosome amplification, chromosome instability, and cell transformation. Upregulation of Pin1 is associated with certain cancers, while downregulation of Pin1 has been implicated in Alzheimer's 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		
Components			1 x 96 tests
10X Mouse Pin1 Capture Antibody		1 x 600µl	
10X Mouse Pin1 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 4BR		1 x 6ml	
Mouse Pin1 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	

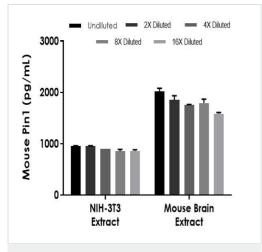
Components		1 x 96 tests	
Stop Solution		1 x 12ml	
TMB Development Solution		1 x 12ml	
Function	Essential PPlase that regulates mitosis presumably by interacting with NIMA and attenuating its mitosis-promoting activity. Displays a preference for an acidic residue N-terminal to the isomerized proline bond. Catalyzing pSer/Thr-Pro cis/trans isomerizations.		
Sequence similarities	Contains 1 PpiC domain. Contains 1 WW domain.		
Domain	The WW domain is required for the interaction with STIL and KIF20B.		
Post-translational modifications	Phosphorylated upon DNA damage, probably by ATM or ATR.		
Cellular localization	Nucleus.		

Images



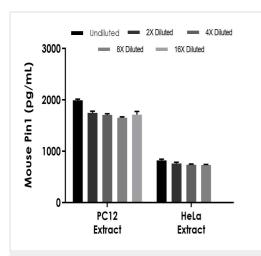
Example of mouse Pin1 standard curve in 1X Cell Extraction Buffer PTR.

The Pin1 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.



The concentrations of Pin1 were measured in duplicate and interpolated from the Pin1 standard curve and corrected for sample dilution. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean Pin1 concentration was determined to be 906 pg/mL in NIH-3T3 extract and 1,803 pg/mL in mouse brain extract.

Interpolated concentrations of native Pin1 in mouse NIH-3T3 extract based on a 35 µg/mL extract load and mouse brain extract based on a 50 µg/mL extract load.



This assay detects human and rat PP2A-alpha.

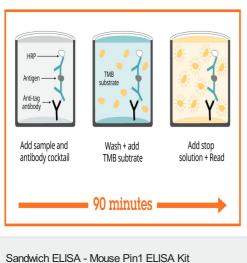


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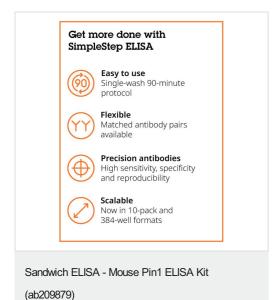
The concentrations of PP2A-alpha in PC12 and HeLa extract were measured in duplicate, interpolated from the mouse PP2A-alpha standard curves and corrected for sample dilution. Undiluted samples are PC12 extract based on a 25 µg/mL extract load and HeLa extract based on a 12.5 µg/mL extract load. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean PP2A-alpha concentration was determined to be 1,763 pg/mL in PC12 extract and 763 pg/mL in HeLa extract.

To learn more about the advantages of recombinant antibodies see



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.

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To learn more about the advantages of SimpleStep ELISA[®] kits see <u>here</u>.

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