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Product datasheet

Human MASPIN ELISA Kit ab218269

Recombinant SimpleStep ELISA

<u>1 References</u> 5 Images

Overview							
Product name	Human MASPIN ELISA Kit						
Detection method	Colorimetric						
Precision					Intra-as	ssay	
	Sample	n	Mean	SD	CV%		
	Overall	8			3.8%		
					Inter-as	ssay	
	Sample	n	Mean	SD	CV%		
	Overall	3			1.4%		
Sample type	Cell culture extracts						
Assay type	Sandwich (quantitative)						
Sensitivity	8 pg/ml						
Range	0.11 ng/ml - 7 ng/ml						
Recovery					Sample specific reco	overy	
	Sample type		Average %		Range		
	Cell culture extracts		108	108 10		7% - 109%	
Assay time	1h 30m						
Assay duration	One step assay						
Species reactivity	Reacts with: Human						
Product overview	Human MASPIN ELISA Kit (ab218269) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of MASPIN protein in cell culture extracts. It uses our proprietary SimpleStep ELISA® technology. Quantitate Human MASPIN with 8 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 (ab203359) is available to use as an alternative to the 96-well microplate provided with SimpleStep ELISA® kits. Notes MASPIN (Mammary Serine Protease Inhibitor) is a 375 amino acid glycosylated protein encoded by the gene SERPINB5. It belongs to a family of proteins known as serpins (serine protease inhibitor), which function as regulators of protein breakdown by acting as suicide inhibitors of the catalytic activity of proteinases. Inhibitory serpins undergo a transition between a stressed and relaxed confirmation, where the stressed confirmation binds to the catalytic serine residue of the protease. MASPIN is thought to interact with extracellular matrix components, glutathione Stransferase, and interferon regulatory factor 6. It was originally thought to play a role in tumor metastasis, but the exact function is unknown. 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 Human MASPIN 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 4BI	1 x 6ml
Human MASPIN Capture Antibody (Lyophilized)	1 vial
Human MASPIN Lyophilized Recombinant Protein	2 vials
Plate Seals	1 unit
Sample Diluent NS (ab193972)	1 x 12ml

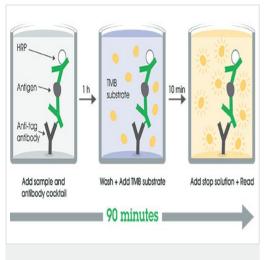
Components		1 x 96 tests	
SimpleStep Pre-Coated 96-Well Microplate (ab206978)		1 unit	
Stop Solution		1 x 12ml	
TMB Development Solution		1 x 12ml	
Function	Tumor suppressor. It blocks the growth, invasion, and metastatic properties of mammary tumors. As it does not undergo the S (stressed) to R (relaxed) conformational transition characteristic of active serpins, it exhibits no serine protease inhibitory activity.		

Normal mammary epithelial cells.

Sequence similaritiesBelongs to the serpin family. Ov-serpin subfamily.Cellular localizationSecreted > extracellular space.

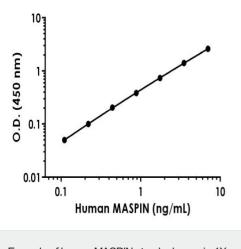
Images

Tissue specificity



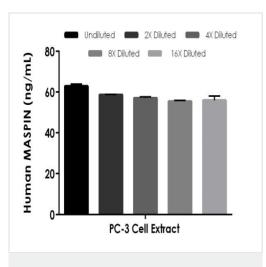
SimpleStep ELISA technology allows the formation of the antibodyantigen complex in one single step, reducing assay time to 90 minutes. Add samples or standards and antibody mix to wells all at once, incubate, wash, and add your final substrate. See protocol for a detailed step-by-step guide.

Other - Human MASPIN ELISA Kit (ab218269)



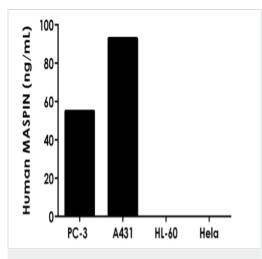
Background-subtracted data values (mean +/- SD) are graphed.

Example of human MASPIN standard curve in 1X Cell Extraction Buffer PTR

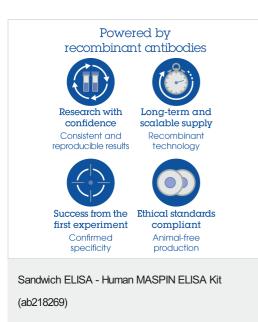


Interpolated concentrations of native MASPIN in human PC-3 cell extract based on a 1,000 µg/mL extract load.

The concentrations of MASPIN were measured in duplicate, interpolated from the MASPIN standard curve, and corrected for sample dilution. The interpolated, dilution factor-corrected values are plotted (mean +/- SD, n=2). The mean MASPIN concentration was determined to be 57.5 ng/mL in PC-3 cell extract.



Interpolated concentrations of native MASPIN in human PC-3, A431, HL-60, and Hela cell extract based on a 10 μ g/mL extract load.



The concentrations of MASPIN were measured in duplicate, interpolated from the MASPIN standard curve. The interpolated, dilution factor-corrected values are plotted (mean +/- SD, n=2). The mean MASPIN concentration was determined to be 55 ng/mL, 93 ng/mL, and non-detectable in PC-3, A431, HL-60, and HeLa cell extract, respectively.

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

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