

Human SEMA4C ELISA Kit **ab284623**

Recombinant SimpleStep ELISA<sup>®</sup>

7 Images

Overview

Product name	Human SEMA4C ELISA Kit				
Detection method	Colorimetric				
Precision	Intra-assay				
	Sample	n	Mean	SD	CV%
	Plasma	8			3.7%
	Inter-assay				
	Sample	n	Mean	SD	CV%
	Plasma	3			9.1%
Sample type	Cell culture supernatant, Serum, Cell Lysate, Hep Plasma, EDTA Plasma				
Assay type	Sandwich (quantitative)				
Sensitivity	23.5 pg/ml				
Range	93.75 pg/ml - 6000 pg/ml				
Recovery	Sample specific recovery				
	Sample type		Average %		Range
	Cell culture supernatant		95		93% - 97%
	Serum		87		84% - 94%
	Hep Plasma		94		92% - 99%
	EDTA Plasma		85		80% - 92%
	Cit plasma		81		80% - 82%
Assay time	1h 30m				
Assay duration	One step assay				

**Species reactivity****Reacts with:** Human**Product overview**

Human SEMA4C ELISA kit (ab284623) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of Human SEMA4C protein in human serum, plasma, cell culture supernatant and cell and tissue extract samples. It uses our proprietary SimpleStep ELISA® technology. Quantitate Human SEMA4C with 23.5 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**

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 SEMA4C Capture Antibody	1 x 600µl
10X Human SEMA4C Detector Antibody	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml
5X Cell Extraction Buffer PTR (ab193970)	1 x 10ml
Antibody Diluent 5BI	1 x 6ml
Human SEMA4C Lyophilized Recombinant Protein	2 vials
Plate Seals	1 unit
Sample Diluent NS (ab193972)	1 x 50ml

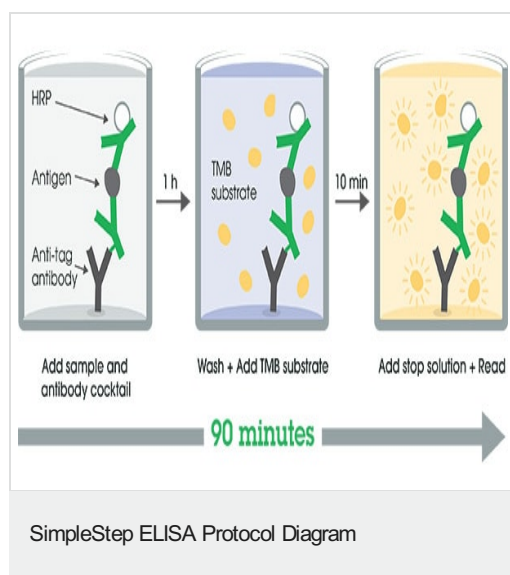
Components	1 x 96 tests
SimpleStep Pre-Coated 96-Well Microplate (ab206978)	1 unit
Stop Solution	1 x 12ml
TMB Development Solution	1 x 12ml

**Function** Probable signaling receptor which may play a role in myogenic differentiation through activation of the stress-activated MAPK cascade.

**Sequence similarities** Belongs to the semaphorin family.  
Contains 1 Ig-like C2-type (immunoglobulin-like) domain.  
Contains 1 PSI domain.  
Contains 1 Sema domain.

**Cellular localization** Cell junction > synapse > postsynaptic cell membrane > postsynaptic density. Cytoplasmic vesicle > secretory vesicle > synaptic vesicle membrane.

## Images



SimpleStep ELISA technology allows the formation of the antibody-antigen 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.

Powered by  
recombinant antibodies



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



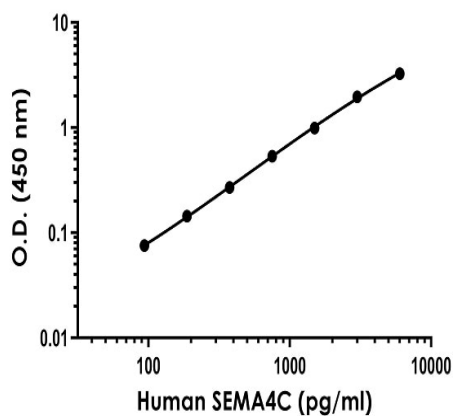
**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

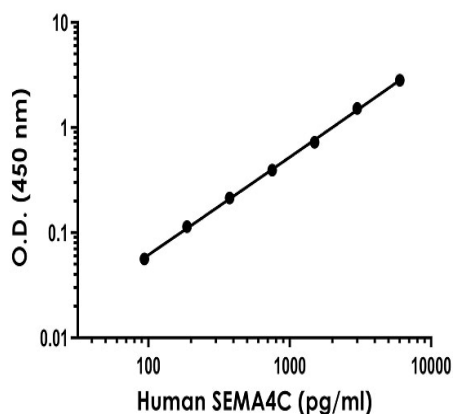
Recombinant Antibody Benefits

To learn more about the advantages of recombinant antibodies see [here](#).



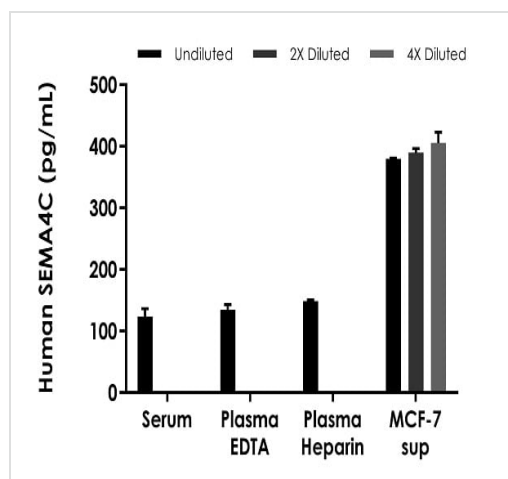
Example of human SEMA4C standard curve. Background-subtracted data values (mean  $\pm$  SD) are graphed.

Example of human SEMA4C standard curve in Sample Diluent NS.



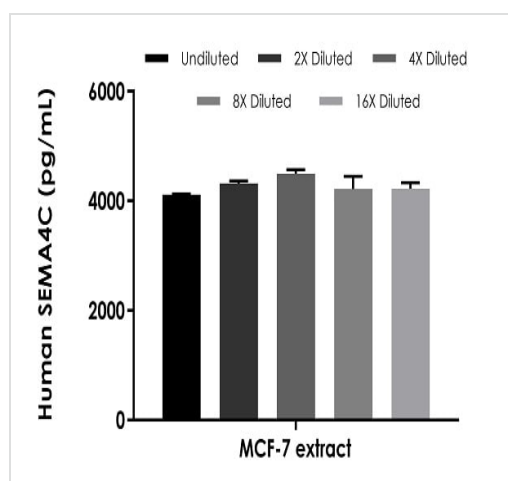
Example of human SEMA4C standard curve. Background-subtracted data values (mean  $\pm$  SD) are graphed.

Example of human SEMA4C standard curve in 1X Cell Extraction Buffer PTR.



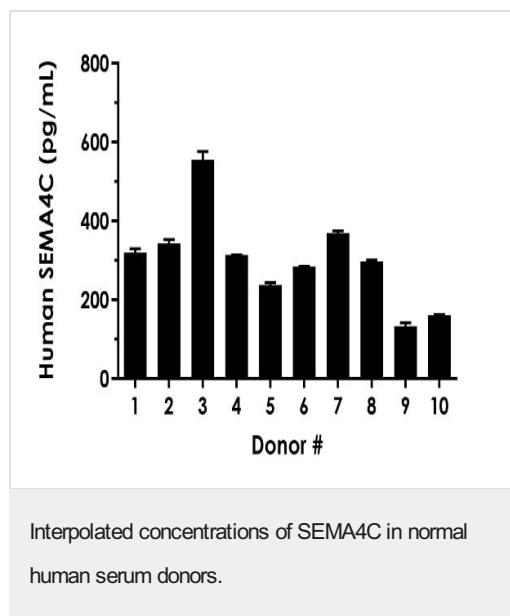
Interpolated concentrations of human SEMA4C in serum, plasma-EDTA, plasma-Heparin, and MCF-7 cell culture supernatant.

Interpolated concentration of native SEMA4C was measured in duplicate at different sample concentrations. Undiluted samples are 100% serum, plasma-EDTA, plasma-Heparin, and MCF-7 cell culture supernatant. The interpolated dilution factor corrected values are plotted (mean  $\pm$  SD, n=2). Sample dilutions are made in Sample Diluent NS.



Interpolated concentrations of human SEMA4C in MCF-7 cell extract.

Interpolated concentration of native SEMA4C was measured in duplicate at different sample concentrations. Undiluted samples are 500  $\mu$ g/mL MCF-7 cell extract. The interpolated dilution factor corrected values are plotted (mean  $\pm$  SD, n=2). Sample dilutions are made in 1X Cell Extraction Buffer PTR.



Serum of ten individual healthy human female donors was measured in duplicate. Interpolated dilution factor corrected values are plotted (mean  $\pm$  SD,  $n=2$ ). The mean SEMA4C concentration was determined to be 301.3 pg/mL with a range of 126.8 – 570.3 pg/mL.

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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