

Human C9 ELISA Kit (Complement C9) ab287178

Recombinant SimpleStep ELISA[®]

7 Images

Overview

Product name Human C9 ELISA Kit (Complement C9)

Detection method Colorimetric

Precision Intra-assay

Sample	n	Mean	SD	CV%
Serum	8			7.8%

Inter-assay

Sample	n	Mean	SD	CV%
Serum	4			9.3%

Sample type Milk, Serum, Hep Plasma, EDTA Plasma, Cit plasma

Assay type Sandwich (quantitative)

Sensitivity 10.6 pg/ml

Range 43.75 pg/ml - 2800 pg/ml

Recovery Sample specific recovery

Sample type	Average %	Range
Milk	102	101% - 102%
Serum	118	118% - 119%
Hep Plasma	108	103% - 112%
EDTA Plasma	114	110% - 117%
Cit plasma	116	115% - 118%

Assay time 1h 30m

Assay duration One step assay

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

Human C9 ELISA kit (ab287178) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of Human C9 protein in human serum, plasma, and milk samples. It uses our proprietary SimpleStep ELISA® technology. Quantitate Human C9 with 10.6 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.

Platform

Pre-coated microplate (12 x 8 well strips)

Properties**Storage instructions**

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

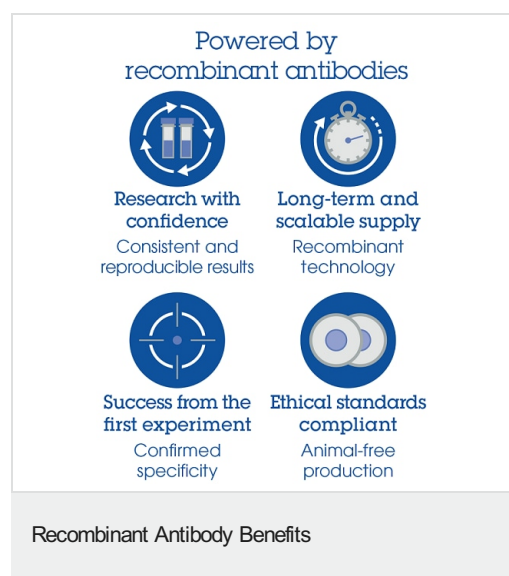
Components	1 x 96 tests	1 x 96 tests
10X Human C9 (Complement C9) Capture Antibody	1 x 600µl	1 x 600µl
10X Human C9 (Complement C9) Detector Antibody	1 x 600µl	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml	1 x 20ml
Antibody Diluent CPI2	1 x 6ml	1 x 6ml
Human C9 (Complement C9) Lyophilized Recombinant Protein	2 vials	2 vials
Plate Seal	1 unit	1 unit
Sample Diluent NS (ab193972)	1 x 50ml	1 x 50ml
SimpleStep Pre-Coated 96-Well Microplate (ab206978)	1 unit	1 unit
Stop Solution	1 x 12ml	1 x 12ml
TMB Development Solution	1 x 12ml	1 x 12ml

Function

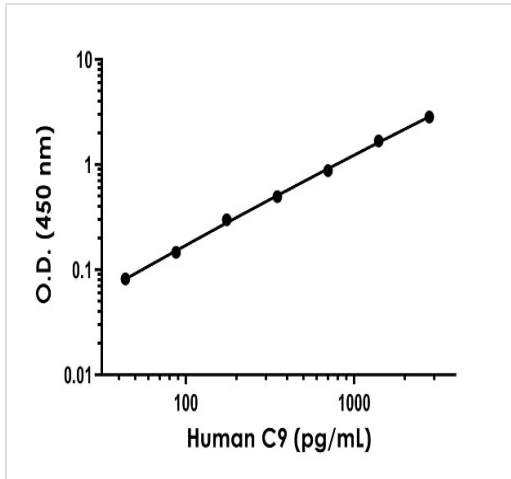
Constituent of the membrane attack complex (MAC) that plays a key role in the innate and adaptive immune response by forming pores in the plasma membrane of target cells. C9 is the

	pore-forming subunit of the MAC.
Tissue specificity	Plasma.
Involvement in disease	Defects in C9 are a cause of complement component 9 deficiency (C9D) [MIM:613825]. A rare defect of the complement classical pathway associated with susceptibility to severe recurrent infections, predominantly by <i>Neisseria gonorrhoeae</i> or <i>Neisseria meningitidis</i> .
Sequence similarities	<p>Belongs to the complement C6/C7/C8/C9 family.</p> <p>Contains 1 EGF-like domain.</p> <p>Contains 1 LDL-receptor class A domain.</p> <p>Contains 1 MACPF domain.</p> <p>Contains 1 TSP type-1 domain.</p>
Post-translational modifications	<p>Thrombin cleaves factor C9 to produce C9a and C9b.</p> <p>Phosphorylation sites are present in the extracellular medium.</p>
Cellular localization	Secreted. Cell membrane. Secreted as soluble monomer. Oligomerizes at target membranes, forming a pre-pore. A conformation change then leads to the formation of a 100 Angstrom diameter pore.

Images

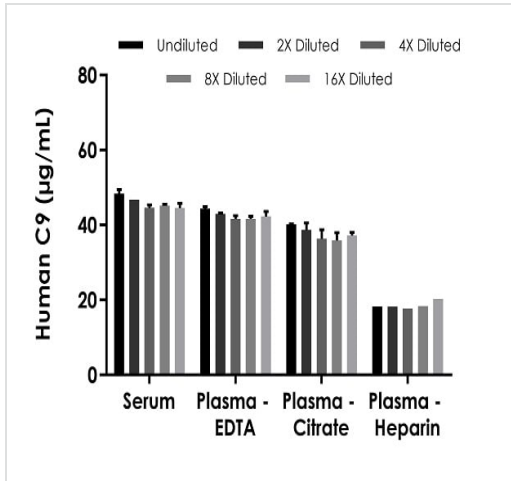


To learn more about the advantages of recombinant antibodies see [here](#).



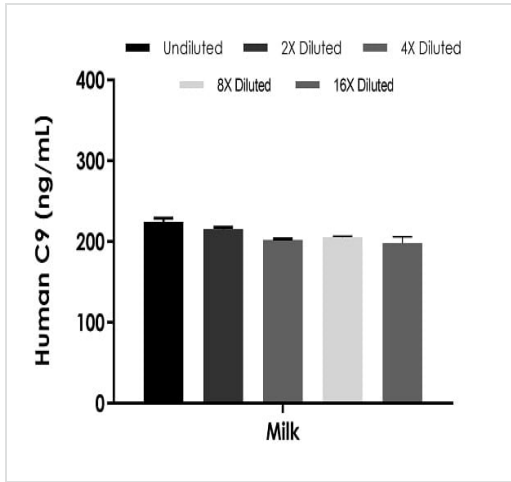
Example of human C9 standard curve. Background-subtracted data values (mean +/- SD) are graphed.

Example of human C9 standard curve in Sample Diluent NS.



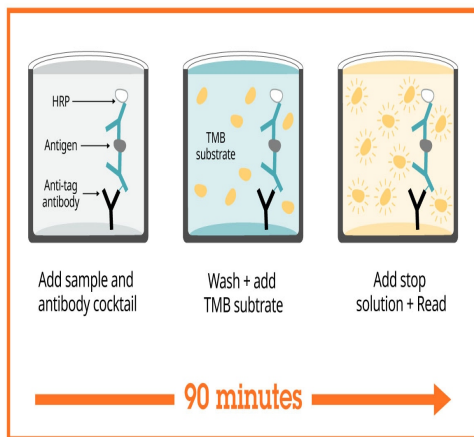
Interpolated concentration of native C9 was measured in duplicate at different sample concentrations. Undiluted samples are 1:20,000 serum, plasma (heparin), plasma (EDTA), and plasma (citrate). The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). Sample dilutions are made in Sample Diluent NS.

Interpolated concentrations of human C9 in serum, plasma (heparin), plasma (EDTA), and plasma (citrate).



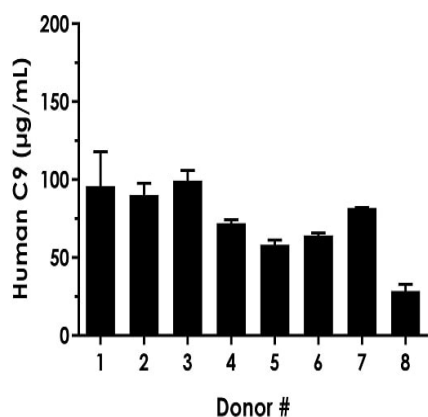
Interpolated concentration of native C9 was measured in duplicate at different sample concentrations. Undiluted samples are 1:167 milk. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). Sample dilutions are made in Sample Diluent NS.

Interpolated concentrations of human C9 in milk.



Sandwich ELISA - Human C9 ELISA Kit
(Complement C9) (ab287178)

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.



Interpolated concentrations of C9 in normal human serum donors.

Serum of ten individual healthy human male donors was measured in duplicate. Interpolated dilution factor corrected values are plotted (mean \pm SD, $n=2$). The mean C9 concentration was determined to be 73.8 $\mu\text{g/mL}$ with a range of 28.5 – 99.3 $\mu\text{g/mL}$.

Get more done with SimpleStep ELISA



Easy to use
Single-wash 90-minute protocol



Flexible
Matched antibody pairs available



Precision antibodies
High sensitivity, specificity and reproducibility



Scalable
Now in 10-pack and 384-well formats

Sandwich ELISA - Human C9 ELISA Kit
(Complement C9) (ab287178)

To learn more about the advantages of SimpleStep ELISA[®] kits see [here](#).

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

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