

Human C1QC Sandwich ELISA Kit Datasheet

For the quantitative detection of Human C1QC concentrations in Plasma, Serum, Cell culture supernatant.

General Information

Catalogue Number	KE00100
Product Name	Human C1QC Sandwich ELISA Kit
Species cross-reactivity	Human
Range (calibration Range)	125 - 8000 pg/mL
Tested applications	Quantification ELISA

Database Links

Entrez Gene	714
SwissProt	P02747

Kit Components & Storage

Microplate - antibody coated 96-well microplate (8 well × 12 strips)	1 plate	Unopened Kit: Store at 2-8°C for 6 months or -20°C for 12 months. Opened Kit: All reagents stored at 2-8°C for 7 days. Please use a new standard for each assay.
Protein standard - 2000 pg/bottle; lyophilized*	2 bottles	
Detection antibody (100X) - 120 μL/vial	1 vial	
Streptavidin-horseradish peroxidase (HRP) (100X) - 120 μL/vial	1 vial	
Sample Diluent PT 3-ef - 30 mL/bottle. For Human serum and plasma	1 bottle	
Sample Diluent PT 4-ef - 30 mL/bottle. For Mouse/Rat serum, plasma and serum-free cell culture supernatants.	1 bottle	
Sample Diluent PT 5-ef - 30 mL/bottle. For tissue lysates.	1 bottle	
Detection Diluent - 30 mL/bottle	1 bottle	
Wash Buffer Concentrate (20X) - 30 mL/bottle	1 bottle	
Extraction Reagent - 30 mL/bottle	1 bottle	
Tetramethylbenzidine Substrate (TMB) - 12 mL/bottle	1 bottle	
Stop Solution - 12 mL/bottle	1 bottle	
Plate Cover Seals	3 pieces	

Product Description

KE00100 is a solid phase sandwich Enzyme Linked-Immuno-Sorbent Assay (Sandwich ELISA). The Human C1QC ELISA kit is to be used to detect and quantify protein levels of endogenous human C1QC. The assay recognizes human C1QC. A monoclonal antibody specific for human C1QC has been pre-coated onto the microwells. The human C1QC protein in samples is captured by the coated antibody after incubation. Following extensive washing, a polyclonal antibody of biotinylated specific for human C1QC is added to detect the captured human C1QC protein. For signal development, horseradish peroxidase (HRP)-conjugated Anti-mouse antibody is added, followed by Tetramethyl-benzidine (TMB) reagent. Solution containing sulfuric acid is used to stop color development and the color intensity which is proportional to the quantity of bound protein is measurable at 450 nm with the correction wavelength set at 630 nm.

Background

The first component of complement, C1, is a calcium-dependent complex of the 3 subcomponents C1q, C1r, and C1s. C1q is composed of 18 polypeptide chains: six A-chains, six B-chains, and six C-chains. Each chain contains a collagen-like region located near the N terminus and a C-terminal globular region. C1q plays an important role in complement activation by immune complexes. Deficiency of C1q has been associated with lupus erythematosus and glomerulonephritis.

Safety Notes

This product is sold for lab research and development use ONLY and not for use in humans or animals. Avoid any skin and eye contact with Stop Solution and TMB. In case of contact, wash thoroughly with water.

Assay Procedure Summary

Step	Reagent	Volume	Incubation	Wash	Notes
1	Standard and Samples	100 µL	120 min	4 times	Cover Wells incubate at 37°C
2	Diluent Antibody Solution	100 µL	60 min	4 times	Cover Wells incubate at 37°C
3	Diluent HRP Solution	100 µL	40 min	4 times	Cover Wells incubate at 37°C
4	TMB Substrate	100 µL	15-20 min	Do not wash	Incubate in the dark at 37°C
5	Stop Solution	100 µL	0 min	Do not wash	-
6	Read plate at 450 nm and 630 nm immediately after adding Stop solution. DO NOT exceed 5 minutes.				

Example data

These standard curves are provided for demonstration only. A standard curve should be generated for each set of samples assayed.

Alternate Text

(pg/mL)	O.D	Average	Corrected
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(pg/mL)	O.D	Average	Corrected
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Precision

Intra-assay Precision (Precision within an assay) Three samples of known concentration were tested 20 times on one plate to assess intra-assay precision.

Inter-assay Precision (Precision between assays) Three samples of known concentration were tested in 24 separate assays to assess inter-assay precision.

Intra-assay Precision				
Sample	n	Mean (pg/mL)	SD	CV%
1	20	? ug/ml	?	?%
2	20	? ug/ml	?	?%
3	20	? ug/ml	?	?%

Inter-assay Precision				
Sample	n	Mean (pg/mL)	SD	CV%
1	20	? ug/ml	?	?%
2	20	? ug/ml	?	?%
3	20	? ug/ml	?	?%