abcam

Product datasheet

Human Protein C ELISA Kit ab137987

1 References 1 Image

Overview

Product name Human Protein C ELISA Kit

Detection methodColorimetric

Precision

Sample	n	Mean	SD	CV%
Overall				= 3.5%

Inter-assay

Intra-assav

Sample	n	Mean	SD	CV%
Overall				= 10.2%

Sample type Cell culture supernatant, Saliva, Milk, Urine, Tissue, Cell Lysate

Assay type Sandwich (quantitative)

Sensitivity = 2 ng/ml

Range 12.5 ng/ml - 100 ng/ml

Recovery = 97 %Assay time 4h 0m

Assay duration Multiple steps standard assay

Species reactivity Reacts with: Human

Product overview Abcam's Protein C Human in vitro ELISA (Enzyme-Linked Immunosorbent Assay) kit is designed

for the quantitative measurement of Protein C in urine, saliva, milk, cell culture supernatant, cell

lysate and tissue samples.

A Protein C specific antibody has been precoated onto 96-well plates and blocked. Standards or test samples are added to the wells and subsequently a Protein C specific biotinylated detection antibody is added and then followed by washing with wash buffer. Streptavidin-Peroxidase Complex is added and unbound conjugates are washed away with wash buffer. TMB is then used to visualize Streptavidin-Peroxidase enzymatic reaction. TMB is catalyzed by Streptavidin-Peroxidase to produce a blue color product that changes into yellow after adding acidic stop solution. The density of yellow coloration is directly proportional to the amount of Protein C captured in plate.

1

The entire kit may be stored at -20°C for long term storage before reconstitution - Avoid repeated freeze-thaw cycles.

Platform Microplate

Properties

Storage instructions Store at -20°C. Please refer to protocols.

Components	1 x 96 tests
100X Streptavidin-Peroxidase Conjugate	1 x 80µl
10X Diluent N Concentrate	1 x 30ml
20X Wash Buffer Concentrate	2 x 30ml
50X Biotinylated Human Protein C Antibody	1 x 120µl
Chromogen Substrate	1 x 7ml
Protein C Microplate (12 x 8 well strips)	1 unit
Protein C Standard	1 vial
Sealing Tapes	3 units
Stop Solution	1 x 11ml

Function Protein C is a vitamin K-dependent serine protease that regulates blood coagulation by

inactivating factors Va and VIIIa in the presence of calcium ions and phospholipids (PubMed:25618265). Exerts a protective effect on the endothelial cell barrier function

(PubMed:25651845).

Tissue specificity Plasma; synthesized in the liver.

Involvement in disease Thrombophilia due to protein C deficiency, autosomal dominant

Thrombophilia due to protein C deficiency, autosomal recessive

Sequence similarities Belongs to the peptidase S1 family.

Contains 2 EGF-like domains.

Contains 1 Gla (gamma-carboxy-glutamate) domain.

Contains 1 peptidase S1 domain.

Post-translational modifications

The vitamin K-dependent, enzymatic carboxylation of some Glu residues allows the modified

protein to bind calcium.

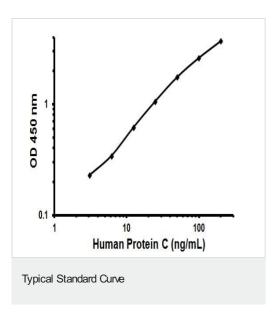
N- and O-glycosylated. Partial (70%) N-glycosylation of Asn-371 with an atypical N-X-C site produces a higher molecular weight form referred to as alpha. The lower molecular weight form, not N-glycosylated at Asn-371, is beta. O-glycosylated with core 1 or possibly core 8 glycans. The iron and 2-oxoglutarate dependent 3-hydroxylation of aspartate and asparagine is (R)

stereospecific within EGF domains.

May be phosphorylated on a Ser or Thr in a region (AA 25-30) of the propeptide.

Cellular localization Secreted. Golgi apparatus. Endoplasmic reticulum.

Images



Representative Standard Curve using ab137987

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