

ARG81090 Human Complement C3 ELISA Kit

Package: 96 wells
Store at: 4°C

Summary

Product Description	ARG81090 Human Complement C3 ELISA Kit is an Enzyme Immunoassay kit for the quantification of Human Complement C3 in plasma, serum, urine, milk, saliva and cell culture media.
Tested Reactivity	Hu
Tested Application	ELISA
Target Name	Complement C3
Conjugation	HRP
Conjugation Note	TMB substrate is used for color development at 450 nm.
Sensitivity	0.0148 ng/ml
Detection Range	0.02 - 10 ng/ml
Sample Type	Plasma, serum, urine, milk, saliva and cell culture media
Alternate Names	CPAMD1; HEL-S-62p; ASP; ARMD9; C3a; C3b; C3bc; Complement C3; C3adesArg; AHUS5; C3 and PZP-like alpha-2-macroglobulin domain-containing protein 1

Properties

Form	96 well
Storage instruction	Store the kit at 2-8°C. Keep microplate wells sealed in a dry bag with desiccants. Do not expose test reagents to heat, sun or strong light during storage and usage. Please refer to the product user manual for detail temperatures of the components.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Database links	GeneID: 718 Human Swiss-port # P01024 Human
Gene Symbol	C3
Gene Full Name	complement component 3
Background	Complement component C3 plays a central role in the activation of complement system. Its activation is required for both classical and alternative complement activation pathways. A peptide (C3a) derived from the encoded protein has antimicrobial activity, so people with C3 deficiency are susceptible to bacterial infection. [provided by RefSeq, Nov 2014]
Function	C3 plays a central role in the activation of the complement system. Its processing by C3 convertase is the central reaction in both classical and alternative complement pathways. After activation C3b can bind covalently, via its reactive thioester, to cell surface carbohydrates or immune aggregates. Derived from proteolytic degradation of complement C3, C3a anaphylatoxin is a mediator of local inflammatory process. In chronic inflammation, acts as a chemoattractant for neutrophils (By similarity). It induces the contraction of smooth muscle, increases vascular permeability and causes histamine release from mast cells and basophilic leukocytes.

C3-beta-c: Acts as a chemoattractant for neutrophils in chronic inflammation.

Acylation stimulating protein: adipogenic hormone that stimulates triglyceride (TG) synthesis and glucose transport in adipocytes, regulating fat storage and playing a role in postprandial TG clearance. Appears to stimulate TG synthesis via activation of the PLC, MAPK and AKT signaling pathways. Ligand for C5AR2. Promotes the phosphorylation, ARRB2-mediated internalization and recycling of C5AR2. [UniProt]

Highlight

Related products:

[Complement component antibodies](#); [Complement component ELISA Kits](#); [Complement component Duos / Panels](#);

New ELISA data calculation tool:

[Simplify the ELISA analysis by GainData](#)

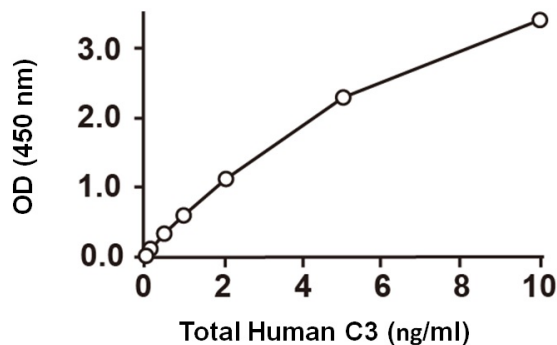
Research Area

Signaling Transduction kit

PTM

C3b is rapidly split in two positions by factor I and a cofactor to form iC3b (inactivated C3b) and C3f which is released. Then iC3b is slowly cleaved (possibly by factor I) to form C3c (beta chain + alpha' chain fragment 1 + alpha' chain fragment 2), C3dg and C3f. Other proteases produce other fragments such as C3d or C3g. C3a is further processed by carboxypeptidases to release the C-terminal arginine residue generating the acylation stimulating protein (ASP). Levels of ASP are increased in adipocytes in the postprandial period and by insulin and dietary chylomicrons. Phosphorylated by FAM20C in the extracellular medium.

Images



ARG81090 Human Complement C3 ELISA Kit standard curve image

ARG81090 Human Complement C3 ELISA Kit results of a typical standard run with optical density reading at 450nm.