

## Product datasheet

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ARG82649 Human C5 / Complement 5 ELISA Kit Package: 96 wells Store at: 4°C

**Summary** 

Product Description ARG82649 Human C5 / Complement 5 ELISA Kit is an Enzyme Immunoassay kit for the quantification of

Human C5 / Complement 5 in serum, plasma, cell culture supernatants, saliva, milk and CSF.

Tested Reactivity Hu

Tested Application ELISA

Specificity Cross-Reactivity:

Monkey: 75%

Mouse, Rat, Pig, Dog, Bovine and Rabbit: None

No significant cross-reactivity observed with complement C1, C2, C3, C4, C6, C7, C8, C9, factor B, factor

D, factor H, factor I and factor P.

Target Name C5 / Complement 5

Conjugation HRP

Conjugation Note Substrate: TMB and read at 450 nm.

Sensitivity 0.084 ng/ml

Sample Type Serum, plasma, cell culture supernatants, saliva, milk and CSF.

Standard Range 0.156 - 10 ng/ml

Sample Volume  $50 \ \mu l$ 

Precision Intra-Assay CV: 4.8%

Inter-Assay CV: 9.2%

Alternate Names ECLZB; CPAMD4; Complement C5; C5D; C5b; C5a; C3 and PZP-like alpha-2-macroglobulin domain-

containing protein 4

## **Application Instructions**

Assay Time ~ 4 hours

**Properties** 

orm 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

Gene Symbol C5

Gene Full Name

complement component 5

Background

This gene encodes a component of the complement system, a part of the innate immune system that plays an important role in inflammation, host homeostasis, and host defense against pathogens. The encoded preproprotein is proteolytically processed to generate multiple protein products, including the C5 alpha chain, C5 beta chain, C5a anaphylatoxin and C5b. The C5 protein is comprised of the C5 alpha and beta chains, which are linked by a disulfide bridge. Cleavage of the alpha chain by a convertase enzyme results in the formation of the C5a anaphylatoxin, which possesses potent spasmogenic and chemotactic activity, and the C5b macromolecular cleavage product, a subunit of the membrane attack complex (MAC). Mutations in this gene cause complement component 5 deficiency, a disease characterized by recurrent bacterial infections. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Nov 2015]

Function

Activation of C5 by a C5 convertase initiates the spontaneous assembly of the late complement components, C5-C9, into the membrane attack complex. C5b has a transient binding site for C6. The C5b-C6 complex is the foundation upon which the lytic complex is assembled.

Derived from proteolytic degradation of complement C5, C5 anaphylatoxin is a mediator of local inflammatory process. Binding to the receptor C5AR1 induces a variety of responses including intracellular calcium release, contraction of smooth muscle, increased vascular permeability, and histamine release from mast cells and basophilic leukocytes (PubMed:8182049). C5a is also a potent chemokine which stimulates the locomotion of polymorphonuclear leukocytes and directs their migration toward sites of inflammation. [UniProt]

Highlight

Related products:

Complement component antibodies; Complement component ELISA Kits; Complement component

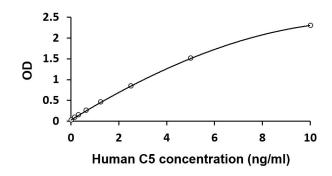
Duos / Panels;

New ELISA data calculation tool: Simplify the ELISA analysis by GainData

Cellular Localization

Secreted. [UniProt]

## **Images**



ARG82649 Human C5 / Complement 5 ELISA Kit standard curve image

ARG82649 Human C5 / Complement 5 ELISA Kit results of a typical standard run with optical density reading at 450 nm.