

Bioactive

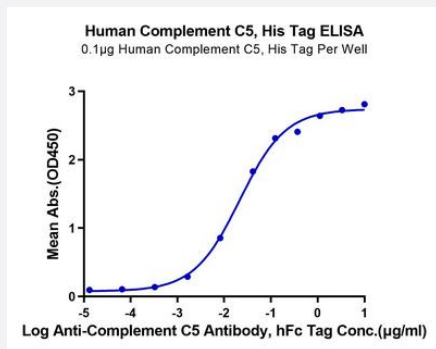
HuPro®

C3 (Human) Recombinant Protein

Catalog # P9738

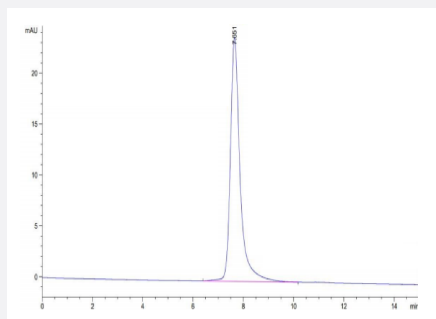
Size 100 ug

Applications



Enzyme-linked Immunoabsorbent Assay

Immobilized Human Complement C5, His Tag at 1 ug/mL (100 uL/well) on the plate. Dose response curve for Anti-Complement C5 Antibody, hFc Tag with the EC50 of 21.4 ng/mL determined by ELISA.



SEC-HPLC

The purity of Human Complement C5 is greater than 95% as determined by SEC-HPLC.

Specification

Product Description

Human C3 (P01031-1, 19 a.a. - 1676 a.a.) partial recombinant protein with His tag at C-terminus expressed in HEK293 cells.

Sequence

QEQTVISAPKIFRVGASENVIQVYGYTEAFDATISIKSYDPKKFSYSSGHVHLSSSENKFQNSAILTIQ
 PKQLPGGQNPVSYVYLEVVSKHFSKSKRMPITYDNGFLFIHTDKPVYTPDQSVKVRVYSLNDDLK
 PAKRETVLTFIDPEGSEVDMVEEIDHIGIISFPDFKIPSNPRYGMWTIKAKYKEDFSTTGTAYFEVKE
 YVLPHFSVSIEPEYNFIGYKNFKNFEITIKARYFYNKVVTEADVYITFGIREDLKDDQKEMMQTAMQN
 TMLINGIAQVTFDSETAVKELSYYSLEDLNNKYLIAVTVIESTGGFSEEAIEPGIKYVLSPLYKLNLVAT
 PLFLKPGIPYPIKVQVKDSLQVLGGVPVTLNAQTIDVNQETSDLDPSKSVTRVDDGVASFVNLPL
 SGVTVLEFNVKTDAPDLPEENQAREGYRAIAYSSLSQSYLYIDWTDNHKALLVGEHLNIVTPKSPYI
 DKITHYNLILSKGKIIHFGTREKFSDASYQSINIPVTQNMVPSSRLLVYIVTGEQTAELVSDSVWLN
 EEKCGNQLQVHLSPDADAYSPGQTVSLNMTATGMDSWVALAAVDSAVYGVQRGAKKPLERVFQ
 FLEKSDLGCGAGGGLNNANVFHLAGLTFLTNANADDSQENDEPCKEILRPRRTLQKKIEEIAAKYK
 HSVVKKCCYDGACVNNDETCEQRAARISLGPRIKAFTECCVVASQLRANISHKMDQLGRLHMK
 TLLPVSKPEIRSYFPESWLWEVHLVPRRKQLQFALPDSLTTWEIQGVGISNTGICVADTVKAKVFK
 DVFLEMNIPYSVVRGEQIQLKGTVYNYRTSGMQFCVKMSAVEGICTSESPVIDHQGTKSSKCVRQ
 KVEGSSSHLVFTVLPLEIGHLNINFSLETWFGKEILVKTLRVVPEGVKRESYSGVTLDPRGYGTIS
 RRKEFPYRIPDLVPKTEIKRILSVKGLLVGEILSAVLSQEGINLTHLPKGSAAELMSVVPVFYVFH
 YLETGNHWNIFHSDPLIEKQKLKKKLKEGMLSIMSYRNADYSYSVWKGGASATWLTAFAALRVLGQ
 VNKYVEQNQNSICNSLLWLVENYQLDNGSFKENSQYQPIKLQGTLPVEARENSLYLTAFTVIGIRKA
 FDICPLVKIDTALIKADNFFLENTLPAQSTFTLAISAYALSLGDKTHPQFRSIVSALKREALVKGNPPI
 YRFWKDNLQHKDSSVPNTGTARMVETTAYALLTSLNLKDINYVNPVIKWLSEEQRYGGGFYSTQD
 TINAIEGLTEYLLVKQLRLSMDIDVSYKHKGALHNYKMTDNFLGRPVEVLLNDDLIVSTGFGSGL
 ATVHVTTVVHKTSTSEEVCSFYLKIDTQDIEASHYRGYGNNDYKRIVACASYKPSREESSSSGSSHA
 VMDISLPTGISANEEDLKALVEGVDQLFTDYQIKDGHVILQLNSIPSSDFLCVRFRIELFEVGFLSP
 ATFTVYEHYRPDKQCTMFYSTSNIQKQVCEGAACKCVEADCGMQEELDLTISAETRKQTACKP
 EIAAYKVSITSITVENVFVKYKATLLDIYKTGEAVAEEKDSEITFKKVTCTNAELVKGRQYLIMGKEAL
 QIKYNFSFRYYPLDSLWIEYWPRDTCSSCQAFANLDEFAEDIFLNGC

Host	Human
Theoretical MW (kDa)	112.5, 73.29
Form	Lyophilized
Preparation Method	Mammalian cell (Expi293, high-yield transient HEK293) expression system
Purity	> 95% as determined by Tris-Bis PAGE; > 95% as determined by HPLC
Endotoxin Level	< 1 EU per 1 ug of protein (determined by LAL method)
Activity	The EC ₅₀ was 21.4 ng/mL, measured by ELISA at 1 ug/mL.
Quality Control Testing	SEC-HPLC and Tris-Bis PAGE SEC-HPLC The purity of Human Complement C5 is greater than 95% as determined by SEC-HPLC.
Recommend Usage	Biological Activity ELISA SDS-PAGE The optimal working dilution should be determined by the end user.
Storage Buffer	Lyophilized from sterile distilled Water is > 100 ug/mL

Storage Instruction

Store at 2°C to 8°C for 1 week. For long term storage, aliquot and store at -20°C to -80°C.
Aliquot to avoid repeated freezing and thawing.

Note

Result of bioactivity analysis

Applications

- Enzyme-linked Immunoabsorbent Assay

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- Functional Study

- SDS-PAGE

Gene Info — C3

Entrez GeneID

[718](#)

Protein Accession#

[P01031-1](#)

Gene Name

C3

Gene Alias

ARMD9, ASP, CPAMD1

Gene Description

complement component 3

Omim ID

[120700](#)

Gene Ontology

[Hyperlink](#)

Gene Summary

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. People with C3 deficiency are susceptible to bacterial infection. [provided by RefSeq]

Other Designations

acylation-stimulating protein cleavage product|complement component C3

Pathway

- [Complement and coagulation cascades](#)
- [Systemic lupus erythematosus](#)

Disease

- [Alzheimer disease](#)
- [Asthma](#)
- [Atherosclerosis](#)
- [Birth Weight](#)
- [Brain Ischemia](#)
- [Bronchial Hyperreactivity](#)
- [Bronchiolitis](#)
- [Calcinosis](#)
- [Cardiovascular Diseases](#)
- [Celiac Disease](#)
- [Chlamydia Infections](#)
- [Choroidal Neovascularization](#)
- [Coronary Artery Disease](#)
- [Coronary Disease](#)
- [Dermatitis](#)
- [Diabetes Complications](#)
- [Diabetes Mellitus](#)
- [Disease Progression](#)
- [Disease Susceptibility](#)
- [Diseases in Twins](#)
- [Edema](#)
- [Erythema Nodosum](#)
- [Genetic Predisposition to Disease](#)
- [Geographic Atrophy](#)

- [Glioblastoma](#)
- [Glioma](#)
- [Hematologic Diseases](#)
- [Hemolytic-Uremic Syndrome](#)
- [Hypersensitivity](#)
- [Hypertension](#)
- [Infant](#)
- [Inflammation](#)
- [Inflammatory Bowel Diseases](#)
- [Leukemia](#)
- [Lupus Erythematosus](#)
- [Lymphoma](#)
- [Macular Degeneration](#)
- [Meningeal Neoplasms](#)
- [Meningioma](#)
- [Metabolic Syndrome X](#)
- [Migraine Disorders](#)
- [Neoplasms](#)
- [Occupational Diseases](#)
- [Osteoporosis](#)
- [Ovarian Neoplasms](#)
- [Pulmonary Disease](#)
- [Recurrence](#)
- [Respiratory Syncytial Virus Infections](#)
- [Retinal Drusen](#)
- [Sarcoidosis](#)

- [Stroke](#)
- [Tobacco Use Disorder](#)
- [Trachoma](#)
- [Tuberculosis](#)
- [Vision](#)
- [Wet Macular Degeneration](#)