

ARG41325 anti-Complement C3 (alpha chain) antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes Complement C3 (alpha chain)
Tested Reactivity	Hu, Ms, Rat
Tested Application	ICC/IF, IHC-P, WB
Specificity	The antibody might reacts to full length, alpha chain and alpha chain fragments of Complement C3.
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	Complement C3 (alpha chain)
Species	Human
Immunogen	Recombinant fusion protein corresponding to aa. 1364-1663 of Human Complement C3 (NP_000055.2).
Conjugation	Un-conjugated
Alternate Names	CPAMD1; HEL-S-62p; ASP; ARMD9; C3a; Complement C3; AHUS5

Application Instructions

Application table	Application	Dilution
	ICC/IF	1:50 - 1:100
	IHC-P	1:50 - 1:100
	WB	1:500 - 1:2000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	HeLa and Rat liver	

Properties

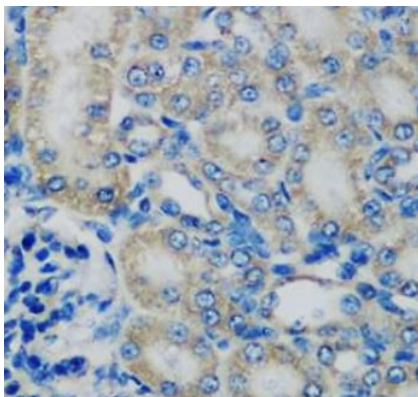
Form	Liquid
Purification	Affinity purified.
Buffer	PBS (pH 7.3), 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

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	<p>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.</p> <p>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.</p> <p>C3-beta-c: Acts as a chemoattractant for neutrophils in chronic inflammation.</p> <p>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]</p>
Calculated Mw	187 kDa
PTM	<p>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.</p> <p>Phosphorylated by FAM20C in the extracellular medium. [UniProt]</p>
Cellular Localization	Secreted. [UniProt]

Images

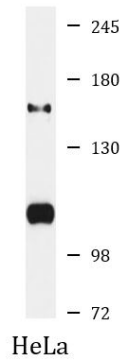


ARG41325 anti-Complement C3 (alpha chain) antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Rat kidney tissue stained with ARG41325 anti-Complement C3 (alpha chain) antibody at 1:200 dilution.

ARG41325 anti-Complement C3 (alpha chain) antibody WB image

Western blot: 25 µg of HeLa cell lysate stained with ARG41325 anti-Complement C3 (alpha chain) antibody at 1:1000 dilution.



ARG41325 anti-Complement C3 (alpha chain) antibody WB image

Western blot: 25 µg of Rat liver lysate stained with ARG41325 anti-Complement C3 (alpha chain) antibody at 1:1000 dilution.

