ARG10709
anti-Complement C3 (alpha chain, netrin domain) antibody [2B5]

Package: 50 µl
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [2B5] recognizes Complement C3 (alpha chain, netrin domain)
Tested Reactivity	Hu
Tested Application	WB
Host	Mouse
Clonality	Monoclonal
Clone	2B5
Isotype	IgG1
Target Name	Complement C3 (alpha chain, netrin domain)
Species	Human
Immunogen	Recombinant netrin domain of Human C3 construct
Conjugation	Un-conjugated
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

Application Instructions

Application table

Application	Dilution
WB	1:1000 - 1:5000

Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

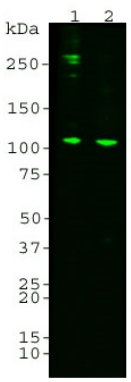
Properties

Form	Liquid
Purification	Purification with Protein G.
Buffer	PBS and 50% Glycerol.
Stabilizer	50% Glycerol
Concentration	1 mg/ml
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

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]
Calculated Mw	187 kDa
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



ARG10709 anti-Complement C3 (alpha chain, netrin domain) antibody [2B5] WB image

Western blot: 1) 0.1 µg of Human C3 protein, and 2) 10 µg of normal Human serum proteins was stained with ARG10709 anti-Complement C3 (alpha chain, netrin domain) antibody [2B5] at 1:3000 dilution. The monoclonal antibodies binds strongly and cleanly to a band at about 115 kDa which represents the intact α subunit of C3 and a weaker proteolytic band at approximately 45 kDa which is the C-terminal of the α subunit including the netrin domain. Bands at 190 kDa and above are likely the pro-C3 and its glycosylated form.