Mouse C3b/iC3b Antibody | anti-C3b/iC3b antibody

Anti-Hu C3b/iC3b Purified

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA129384	**Mouse**	**Human, Non-human primates**	**immunoassay, Radioimmunoassay, Immunocytochemistry, Flow Cytometry, Functional Assay, ELISA**

PRODUCT SYNONYMS

C3b/iC3b; Anti-Hu C3b/iC3b Purified; complement C3; complement component C3; complement component C3b; complement component iC3b; anti-C3b/iC3b antibody

PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Human, Non-human primates
Isotype	Mouse IgG1 kappa
Clone Number	3E7
Specificity	The mouse monoclonal antibody 3E7 recognizes complement component C3b and iC3b. It does not cross-react with C3d.
Purity/Purification	Purified by protein-A affinity chromatography.
Form/Format	Phosphate buffered saline (PBS), pH 7.4, 15 mM sodium azide
Concentration	1mg/ml (varies by lot)
Applicable Applications for anti-C3b/iC3b antibody	RIA (Radioimmunoassay), ICC (Immunocytochemistry), FCM/FACS (Flow Cytometry), ELISA
Immunogen	human complement component C3b
Conjugation	Purified
Preparation and Storage	Store at 2-8 degree C. Do not freeze.

IMAGES

FCM/FACS (Flow Cytometry)
Separation of human lymphocytes stained using anti-human C3b/iC3b (3E7) purified antibody (concentration in sample 0.5ug/ml, GAM APC, red-filled) from lymphocytes stained using mouse IgG1 isotype control (MOPC-21) purified antibody (concentration in sample 0.5ug/ml, same as C3b/iC3b purified concentration, GAM APC, black-dashed) in flow cytometry analysis (surface staining) of human stimulated (PMA + Ionomycin) peripheral blood mononuclear cell suspension.

FCM/FACS (Flow Cytometry)
Flow cytometry surface staining pattern of human stimulated (PMA + Ionomycin) peripheral blood mononuclear cells stained using anti-human C3b/iC3b (3E7) purified antibody (concentration in sample 0.5ug/ml) GAM APC.

ADDITIONAL INFORMATION

Related Product Information for anti-C3b/iC3b antibody	Complement component C3 plays a key role in the activation of complement system. In classical complement system pathway the activated C2 and C4 form classical C3-convertase (C4b2b) which cleaves C3 into C3a and C3b. In alternative complement system pathway C3 is cleaved by alternative C3-convertase (C3bBb), composed of C3b (which can be generated also by spontaneous hydrolysis of C3) and the activated form of factor B. C3b activates downstream cascade leading to formation of pores in the plasma membrane of attacked cell. C3b and its proteolytically inactive form iC3b also serve as important opsonins. C3b can generate C3f, as well as the iC3b can be further cleaved into C3c, C3d and C3g. Complement system is regulated by effective inactivation of free C3b by factor H and factor I. C3b attached to the surface of its target is protected from this inactivation. Complement system is also regulated by other proteins, e.g. CD35, CD46, CD55, or CD59. Undesired activation of complement cascade can lead to severe diseases such as PNH, rheumatoid arthritis, macular degeneration and other. Recently it has been demonstrated to take part in complications associated with Covid-19.
References	*Li Y, Williams ME, Cousar JB, Pawluczkowycz AW, Lindorfer MA, Taylor RP: Rituximab-CD20 complexes are shaved from Z138 mantle cell lymphoma cells in intravenous and subcutaneous SCID mouse models. J Immunol. 2007 Sep 15;179(6):4263-71. , URL: https://pubmed.ncbi.nlm.nih.gov/17785867/,*Kennedy AD, Solga MD, Schuman TA, Chi AW, Lindorfer MA, Sutherland WM, Foley PL, Taylor RP: An anti-C3b(i) mAb enhances complement activation, C3b(i) deposition, and killing of CD20+ cells by rituximab. 2003 Feb 1;101(3):1071-9., URL: https://pubmed.ncbi.nlm.nih.gov/12393727/,*Pokrass MJ, Liu MF, Lindorfer MA, Taylor RP: Activation of complement by monoclonal antibodies that target cell-associated beta?-microglobulin: implications for cancer immunotherapy. Mol Immunol. 2013 Dec;56(4):549-60., URL: https://pubmed.ncbi.nlm.nih.gov/23911412/,*DiLillo DJ, Pawluczkowycz AW, Peng W, Kennedy AD, Beum PV, Lindorfer MA, Taylor RP: Selective and efficient inhibition of the alternative pathway of complement by a mAb that recognizes C3b/iC3b. Mol Immunol. 2006 Mar;43(7):1010-9., URL: https://pubmed.ncbi.nlm.nih.gov/15961157/,*Lindorfer MA, Pawluczkowycz AW, Peek EM, Hickman K, Taylor RP, Parker CJ: A novel approach to preventing the hemolysis of paroxysmal nocturnal hemoglobinuria: both complement-mediated cytolysis and C3 deposition are blocked by a monoclonal antibody specific for the alternative pathway of complement. Blood. 2010 Mar 18;115(11):2283-91., URL: https://pubmed.ncbi.nlm.nih.gov/20068220/,

NCBI AND UNIPROT INFORMATION

NCBI GI #	152012784
NCBI GeneID	718
UniProt Accession #	P01024; A7E236
Molecular Weight	187,148 Da
NCBI Official Full Name	Complement component 3
NCBI Official Synonym Full Names	complement component 3
NCBI Official Symbol	C3
NCBI Official Synonym Symbols	ASP; C3a; C3b; AHUS5; ARMD9; CPAMD1
NCBI Protein Information	complement C3; prepro-C3; C3a anaphylatoxin; complement component C3; complement component C3a; complement component C3b; acylation-stimulating protein cleavage product; C3 and PZP-like alpha-2-macroglobulin domain-containing protein 1
UniProt Protein Name	Complement C3
UniProt Gene Name	**C3**
UniProt Synonym Gene Names	CPAMD1; ASP
UniProt Entry Name	CO3_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: https://stage.aaabiotech.com/mouse-human-primate-antibody/c3b-ic3b/129384