

Datasheet for ABIN2191788

anti-C3 antibody



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Overview

Quantity:	100 µg
Target:	C3
Reactivity:	Mouse
Host:	Rat
Clonality:	Monoclonal
Conjugate:	This C3 antibody is un-conjugated
Application:	Western Blotting (WB), Immunoprecipitation (IP), Flow Cytometry (FACS), Immunofluorescence (IF), Immunoassay (IA)

Product Details

Clone:	11H9
Isotype:	IgG2a
Cross-Reactivity (Details):	Cross reactivity: Mouse C4 : No
Sterility:	0.2 µm filtered

Target Details

Target:	C3
Abstract:	C3 Products
Background:	The monoclonal antibody 11H9 recognizes mouse complement component C3 and its activation products, C3b, iC3b, C3d and C3dg. The complement system is an important part of the humoral response in innate immunity, consisting of three different pathways. The third

Target Details

complement component, C3, is central to the classical, alternative and lectin pathways of complement activation. Activation products of the complement cascade contain neo-epitopes that are not present in the individual native components. The complement factor C3 consists of an alpha- and a beta-chain. The synthesis of C3 is tissue-specific and is modulated in response to a variety of stimulatory agents. C3 is the most abundant protein of the complement system with serum protein levels of about 1.3 mg/mL. An inherited deficiency of C3 predisposes the person to frequent assaults of bacterial infections. In ulcerative colitis, and idiopathic chronic inflammatory bowel disease, the deposition of C3 in the diseased mucosa has been reported. Proteolysis by certain enzymes results in the cleavage of C3 into C3a and C3b. C3b becomes attached to immune complexes and is further cleaved into iC3b, C3c, C3dg and C3f. The monoclonal antibody 11H9 recognizes both intact C3 and its cleaved products C3b, iC3b, C3d and C3dg. These activation products are present in acute as well as chronic inflammatory conditions. In chronic inflammatory condition, primarily the C3dg product resides at the place of inflammation (C3c being cleared) which is recognized by antibody 11H9. The chronic processing/activation of C3 is taking place at a lower level, which would reduce detection of the C3 fragments C3b, iC3b, and C3c. Aliases Complement component C3 Immunogen C57BL/6 thymocytes saturated with rat anti-Thy-1 monoclonal antibody of IgG2b subclass (RmT1)

Pathways: [Complement System](#), [Regulation of Leukocyte Mediated Immunity](#), [Positive Regulation of Immune Effector Process](#), [Regulation of G-Protein Coupled Receptor Protein Signaling](#)

Application Details

Application Notes: For Immunohistochemistry, flow cytometry and Western blotting, dilutions to be used depend on detection system applied. It is recommended that users test the reagent and determine their own optimal dilutions. The typical starting working dilution is 1:50. Positive MPL-lpr kidney cells control F: As positive control brain sections of APPQ mice were used and as negative control isotype matched material Negative Wild type kidney cells control

Restrictions: For Research Use only

Handling

Buffer: PBS, containing 0.1 % bovine serum albumin and 0.02 % sodium azide.

Preservative: Sodium azide

Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Handling

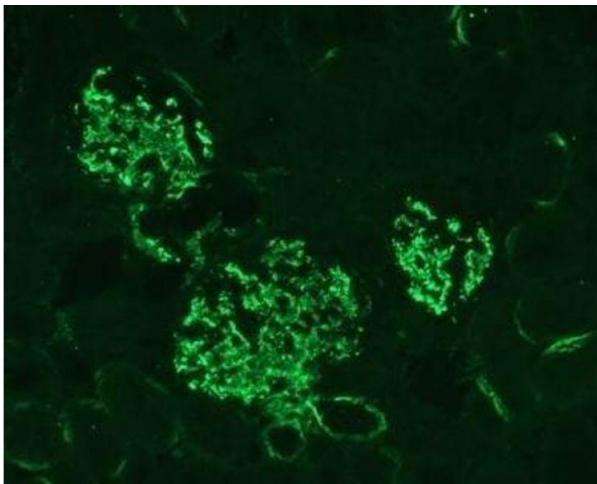
Storage: 4 °C

Storage Comment: Product should be stored at 4 °C. Under recommended storage conditions, product is stable for at least one year. The exact expiry date is indicated on the label.

Publications

Product cited in: Zhou, Fonseca, Pisalyaput, Tenner: "Complement C3 and C4 expression in C1q sufficient and deficient mouse models of Alzheimer's disease." in: **Journal of neurochemistry**, Vol. 106, Issue 5, pp. 2080-92, (2008) ([PubMed](#)).

Images



Immunofluorescence

Image 1. C3 protein fragments deposited on kidney cells of MPL-lpr mouse. Staining with antibody 11H9 . Glomerular staining pattern.