Datasheet for ABIN2191856

anti-CD59a antibody (FITC)

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Overview

Quantity:	100 µg
Target:	CD59a (CD59A)
Reactivity:	Mouse
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This CD59a antibody is conjugated to FITC
Application:	Flow Cytometry (FACS), Western Blotting (WB), Functional Studies (Func), Immunoassay (IA), Immunofluorescence (IF)

Product Details

Clone:	7A6
Sterility:	0.2 µm filtered

Target Details

Target:	CD59a (CD59A)
Alternative Name:	CD59a Glycoprotein (CD59A Products)
Background:	The monoclonal antibody 7A6 (previously known as mCD59.3) recognizes mouse CD59a, a potent inhibitor of the complement membrane attack complex (MAC) action. CD59 regulates the formation and function of the lytic C5b-9 complex by binding C8 and preventing the unfolding and membrane insertion of C9 and by binding C9 and restricting its polymerization.CD59 is a small (18 - 25 kDa) molecule, linked to the cell membrane through a

Target Details

	glycosyl phosphatidylinositol (GPI) anchor and comprising 77 amino acids with a single N-linked carbohydrate group at Asn-18. Analogues of CD59 can be found in all species with similar structures and sizes. In contrast to all other species, mice have two genes encoding a CD59a and a CD59b protein. These two molecules are 63 % identical at the amino acid level and share all major structural features. CD59a is broadly distributed on endothelia, erythrocytes, platelets and on numerous other cell types in organs, a distribution pattern resembling that of CD59 in other species. Expression of CD59b is restricted to germ cell elements in the testis and mature spermatozoa. Both CD59a and CD59b inhibit human and rodent complement with similar efficiency. CD59 may be involved in rheumatoid arthritis, motor nerve injury in the Guillain-Barré sydrome and in other diseases where defective inhibition of complement activation on self tissue is involved. Furthermore, CD59 may play an important part in abrogating the effects of complement attack in renal disease. Its presence and protective effect have already been demonstrated on human renal cells. Aliases Membrane attack complex inhibition factor, MACIF, MAC-inhibitory protein, Protectin, CD59 Immunogen mCD59a-Fc

Application Details

Application Notes:	For immunohistology, 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. For functional studies, in vitro dilutions have to be optimized in user's experimental setting.
Restrictions:	For Research Use only

Handling

Buffer:	PBS, containing 1.0 % 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.
Storage:	4 °C
Storage Comment:	Product should be stored at 4 °C. Under recommended storage conditions, product is stable for one year.
Expiry Date:	12 months

Publications

Product cited in:	Willison, Halstead, Beveridge, Zitman, Greenshields, Morgan, Plomp: "The role of complement and complement regulators in mediating motor nerve terminal injury in murine models of Guillain-Barré syndrome." in: **Journal of neuroimmunology**, Vol. 201-202, pp. 172-82, (2008) (PubMed). Williams, Mizuno, Richards, Holt, Morgan: "Deletion of the gene encoding CD59a in mice increases disease severity in a murine model of rheumatoid arthritis." in: **Arthritis and rheumatism**, Vol. 50, Issue 9, pp. 3035-44, (2004) (PubMed). Harris, Hanna, Mizuno, Holt, Marchbank, Morgan: "Characterization of the mouse analogues of CD59 using novel monoclonal antibodies: tissue distribution and functional comparison." in: **Immunology**, Vol. 109, Issue 1, pp. 117-26, (2003) (PubMed).