

ARG23638 anti-Complement Factor B (Ba Fragment) antibody [014III-33.2.4.3]

Package: 50 µl
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [014III-33.2.4.3] recognizes Complement Factor B (Ba Fragment). This product recognizes the 30kDa Ba fragment of 90kDa human complement factor B, present in blood serum. C3b associates with complement factor B, inducing conformational change. This enables complement factor D to cleave the N-terminal of complement factor B (the Ba subunit), leaving the 63 kDa Bb subunit associated with C3b, forming C3 convertase. Subunit Ba inhibits lymphocyte proliferation. Conversely, subunit Bb is involved in the proliferation of preactivated B lymphocytes. This antibody has been reported for use in functional studies to block activity of the target protein. Removal of Sodium Azide is recommended prior to use in functional assays.
Tested Reactivity	Hu
Tested Application	ELISA, FACS, FuncSt, IHC-Fr, WB
Host	Mouse
Clonality	Monoclonal
Clone	014III-33.2.4.3
Isotype	IgG1
Target Name	Complement Factor B (Ba Fragment)
Species	Human
Immunogen	Purified Human complement factor b.
Conjugation	Un-conjugated
Alternate Names	Properdin factor B; GBG; BF; PBF2; CFAB; BFD; Complement factor B; CFBD; Glycine-rich beta glycoprotein; FB; ARMD14; C3/C5 convertase; EC 3.4.21.47; FBI12; AHUS4; H2-Bf

Application Instructions

Application table	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">Application</th> <th style="width: 50%;">Dilution</th> </tr> </thead> <tbody> <tr> <td>ELISA</td> <td>Assay-dependent</td> </tr> <tr> <td>FACS</td> <td>Assay-dependent</td> </tr> <tr> <td>FuncSt</td> <td>Assay-dependent</td> </tr> <tr> <td>IHC-Fr</td> <td>Assay-dependent</td> </tr> <tr> <td>WB</td> <td>Assay-dependent</td> </tr> </tbody> </table>	Application	Dilution	ELISA	Assay-dependent	FACS	Assay-dependent	FuncSt	Assay-dependent	IHC-Fr	Assay-dependent	WB	Assay-dependent
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Application Note	<p>ELISA: This product binds both the Ba fragment and the whole protein so is not suitable for all ELISA applications.</p> <p>* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.</p>												

Properties

Form	Liquid
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Purification	Purification with Protein A.
Buffer	BBS and 0.1% Sodium azide.
Preservative	0.1% Sodium azide
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 or below. 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	CFB
Gene Full Name	complement factor B
Background	This gene encodes complement factor B, a component of the alternative pathway of complement activation. Factor B circulates in the blood as a single chain polypeptide. Upon activation of the alternative pathway, it is cleaved by complement factor D yielding the noncatalytic chain Ba and the catalytic subunit Bb. The active subunit Bb is a serine protease which associates with C3b to form the alternative pathway C3 convertase. Bb is involved in the proliferation of preactivated B lymphocytes, while Ba inhibits their proliferation. This gene localizes to the major histocompatibility complex (MHC) class III region on chromosome 6. This cluster includes several genes involved in regulation of the immune reaction. Polymorphisms in this gene are associated with a reduced risk of age-related macular degeneration. The polyadenylation site of this gene is 421 bp from the 5' end of the gene for complement component 2. [provided by RefSeq, Jul 2008]
Function	Factor B which is part of the alternate pathway of the complement system is cleaved by factor D into 2 fragments: Ba and Bb. Bb, a serine protease, then combines with complement factor 3b to generate the C3 or C5 convertase. It has also been implicated in proliferation and differentiation of preactivated B-lymphocytes, rapid spreading of peripheral blood monocytes, stimulation of lymphocyte blastogenesis and lysis of erythrocytes. Ba inhibits the proliferation of preactivated B-lymphocytes. [UniProt]
Calculated Mw	86 kDa