

## ARG56101 anti-CD59 antibody [BRA-10G]

Package: 50 µg  
Store at: -20°C

### Summary

Product Description	Mouse Monoclonal antibody [BRA-10G] recognizes CD59
Tested Reactivity	Hu
Tested Application	FACS, FuncSt, ICC/IF
Host	Mouse
Clonality	Monoclonal
Clone	BRA-10G
Isotype	IgG1, kappa
Target Name	CD59
Species	Human
Immunogen	Human K562 tumor cells.
Conjugation	Un-conjugated
Alternate Names	EJ30; M1RL; Membrane attack complex inhibition factor; CD antigen CD59; EJ16; Membrane inhibitor of reactive lysis; MIC11; EL32; HRF20; HRF-20; MEM43 antigen; MIN1; MIN2; MIN3; 1F5 antigen; 1F5; MACIF; MAC-IP; MSK21; Protectin; G344; p18-20; CD59 glycoprotein; MEM43; MAC-inhibitory protein; 16.3A5; 20 kDa homologous restriction factor

### Application Instructions

Application table	Application	Dilution
	FACS	0.5 - 1 µg/10 <sup>6</sup> cells in 0.1ml
	FuncSt	Assay-dependent
	ICC/IF	0.5 - 1 µg/ml
	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 (pH 7.4), 0.05% Sodium azide and 0.1 mg/ml BSA
Preservative	0.05% Sodium azide
Stabilizer	0.1 mg/ml BSA
Concentration	0.2 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

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Database links	<a href="#">GeneID: 966 Human</a>  <a href="#">Swiss-port # P13987 Human</a>
Gene Symbol	CD59
Gene Full Name	CD59 molecule, complement regulatory protein
Background	This gene encodes a cell surface glycoprotein that regulates complement-mediated cell lysis, and it is involved in lymphocyte signal transduction. This protein is a potent inhibitor of the complement membrane attack complex, whereby it binds complement C8 and/or C9 during the assembly of this complex, thereby inhibiting the incorporation of multiple copies of C9 into the complex, which is necessary for osmolytic pore formation. This protein also plays a role in signal transduction pathways in the activation of T cells. Mutations in this gene cause CD59 deficiency, a disease resulting in hemolytic anemia and thrombosis, and which causes cerebral infarction. Multiple alternatively spliced transcript variants, which encode the same protein, have been identified for this gene. [provided by RefSeq, Jul 2008]
Function	<p>Potent inhibitor of the complement membrane attack complex (MAC) action. Acts by binding to the C8 and/or C9 complements of the assembling MAC, thereby preventing incorporation of the multiple copies of C9 required for complete formation of the osmolytic pore. This inhibitor appears to be species-specific. Involved in signal transduction for T-cell activation complexed to a protein tyrosine kinase.</p> <p>The soluble form from urine retains its specific complement binding activity, but exhibits greatly reduced ability to inhibit MAC assembly on cell membranes. [UniProt]</p>
Calculated Mw	14 kDa
PTM	N- and O-glycosylated. The N-glycosylation mainly consists of a family of biantennary complex-type structures with and without lactosamine extensions and outer arm fucose residues. Also significant amounts of triantennary complexes (22%). Variable sialylation also present in the Asn-43 oligosaccharide. The predominant O-glycans are mono-sialylated forms of the disaccharide, Gal-beta-1,3GalNAc, and their sites of attachment are probably on Thr-76 and Thr-77. The GPI-anchor of soluble urinary CD59 has no inositol-associated phospholipid, but is composed of seven different GPI-anchor variants of one or more monosaccharide units. Major variants contain sialic acid, mannose and glucosamine. Sialic acid linked to an N-acetylhexosamine-galactose arm is present in two variants. Glycated. Glycation is found in diabetic subjects, but only at minimal levels in nondiabetic subjects. Glycated CD59 lacks MAC-inhibitory function and confers to vascular complications of diabetes.
Cellular Localization	Cell surface