

ARG59344 anti-CD59 antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes CD59
Tested Reactivity	Hu
Tested Application	FACS, IHC-P
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	CD59
Species	Human
Immunogen	Recombinant protein corresponding to L26-N102 of Human CD59.
Conjugation	Un-conjugated
Alternate Names	EJ30; MIRL; 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	1 - 3 µg/10 ⁶ cells
	IHC-P	0.5 - 1 µg/ml
Application Note	IHC-P: Antigen Retrieval: By heat mediation. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

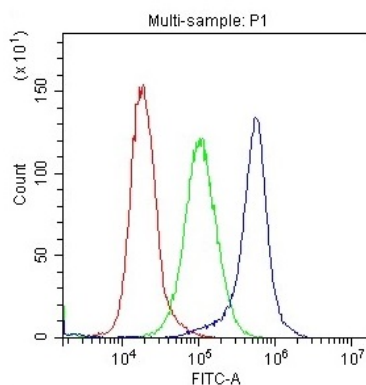
Properties

Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	0.9% NaCl, 0.2% Na ₂ HPO ₄ , 0.05% Sodium azide and 5% BSA.
Preservative	0.05% Sodium azide
Stabilizer	5% BSA
Concentration	0.5 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.

Bioinformation

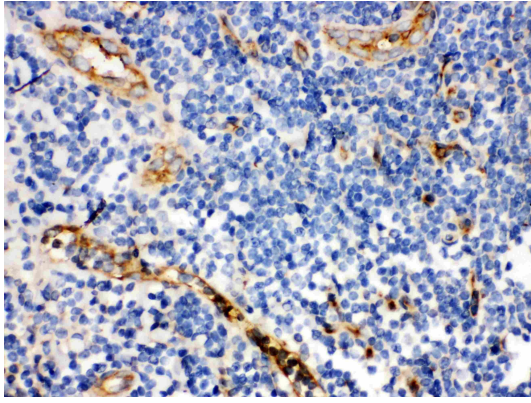
Gene Symbol	CD59
Gene Full Name	CD59 molecule, complement regulatory protein
Background	This gene encodes a cell surface glycoprotein that regulates complement-mediated cell lysis, and it is involved in lymphocyte signal transduction. This protein is a potent inhibitor of the complement membrane attack 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	<p>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.</p> <p>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. [UniProt]</p>
Cellular Localization	Cell membrane; Lipid-anchor, GPI-anchor. Secreted. Note=Soluble form found in a number of tissues. [UniProt]

Images



ARG59344 anti-CD59 antibody FACS image

Flow Cytometry: K562 cells were blocked with 10% normal goat serum and then stained with ARG59344 anti-CD59 antibody (blue) at $1 \mu\text{g}/10^6$ cells for 30 min at 20°C , followed by DyLight[®]488 labelled secondary antibody. Isotype control antibody (green) was rabbit IgG ($1 \mu\text{g}/10^6$ cells) used under the same conditions. Unlabelled sample (red) was also used as a control.



ARG59344 anti-CD59 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human tonsil stained with ARG59344 anti-CD59 antibody.