ARG22947
anti-CD55 antibody [67] (PE)

Package: 50 tests
Store at: 4°C

Summary

Product Description	PE-conjugated Mouse Monoclonal antibody [67] recognizes CD55 Mouse anti Human CD55 antibody, clone 67 recognizes the human CD55 cell surface antigen, a GPI linked molecule also known as decay accelerating factor (DAF). CD55 is expressed by a wide range of cell types.CD55 is the complement regulatory protein, decay accelerating factor (DAF) (Lublin and Atkinson 1989). Human CD55 is a ~70 kDa glycoprotein (in erythrocytes) anchored in the membrane by glycosylphosphatidylinositol tail. In other cells the apparent molecular weight is somewhat larger. It has a substantial content of O-glycans, and also on N-glycan. DAF binds to activated C4b or C3b complement fragments on the cell surface, preventing the assembly and accelerating the decay of both classical and alternative pathways. DAF carries the Cromer related blood group antigens.DAF has a wide distribution on cells in non-hemopoietic tissues, particularly epithelium and is specifically found at the fetal-maternal interface in placenta (Holmes et al. 1990 and Yang et al. 2009). Soluble forms of DAF are found, for example, in plasma, saliva and urine (Medof et al. 1987). The antigen on erythrocytes is pronase and chymotrypsin sensitive, but resistant to trypsin.
Tested Reactivity	Hu
Tested Application	FACS
Host	Mouse
Clonality	Monoclonal
Clone	67
Isotype	IgG1
Target Name	CD55
Species	Human
Immunogen	K562 cell line.
Conjugation	PE
Alternate Names	DAF; CD antigen CD55; CROM; Complement decay-accelerating factor; CR; TC

Application Instructions

Application table

Application	Dilution
FACS	Assay-dependent

Application Note: FACS: Use 10 µl of the suggested working dilution to label 10^6 cells in 100 µl. Please note: Arigo do not recommend the use of this reagent to stain erythrocytes.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

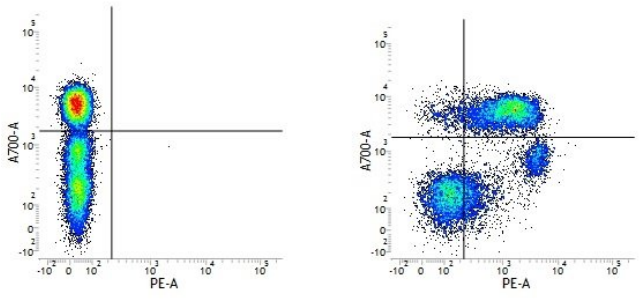
Form	Liquid
Purification	Purification with Protein A.

Buffer	PBS, 0.09% Sodium azide, 1% BSA and 5% Sucrose
Preservative	0.09% Sodium azide
Stabilizer	1% BSA and 5% Sucrose
Storage instruction	Aliquot and store in the dark at 2-8°C. Keep protected from prolonged exposure to light. 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	CD55
Gene Full Name	CD55 molecule, decay accelerating factor for complement (Cromer blood group)
Background	This gene encodes a glycoprotein involved in the regulation of the complement cascade. Binding of the encoded protein to complement proteins accelerates their decay, thereby disrupting the cascade and preventing damage to host cells. Antigens present on this protein constitute the Cromer blood group system (CROM). Alternative splicing results in multiple transcript variants. The predominant transcript variant encodes a membrane-bound protein, but alternatively spliced transcripts may produce soluble proteins. [provided by RefSeq, Jul 2014]
Function	This protein recognizes C4b and C3b fragments that condense with cell-surface hydroxyl or amino groups when nascent C4b and C3b are locally generated during C4 and c3 activation. Interaction of daf with cell-associated C4b and C3b polypeptides interferes with their ability to catalyze the conversion of C2 and factor B to enzymatically active C2a and Bb and thereby prevents the formation of C4b2a and C3bBb, the amplification convertases of the complement cascade. [UniProt]
Calculated Mw	41 kDa
PTM	The Ser/Thr-rich domain is heavily O-glycosylated.

Images



ARG22947 anti-CD55 antibody [67] (PE) FACS image

Flow Cytometry: Figure A. Alexa Fluor700 conjugated Mouse anti Human CD3 and PE-conjugated Mouse IgG1 isotype control. Figure B. Alexa Fluor700 conjugated Mouse anti Human CD3 and ARG22947 anti-CD55 antibody [67] (PE). All experiments performed on Human peripheral blood lymphocytes.