

ARG23071 anti-CD42a antibody [FMC-25] (FITC)

Package: 50 µg

Store at: 4°C

Summary

Product Description	FITC-conjugated Mouse Monoclonal antibody [FMC-25] recognizes CD42a Mouse anti Human CD42a antibody, clone FMC-25 recognizes human CD42a, also known as Platelet glycoprotein IX, Glycoprotein 9 or GP-IX. CD42a is a 177 amino acid, ~20kDa type I single pass transmembrane glycoprotein containing a single leucine-rich repeat containing N-terminal domain and a single leucine-rich repeat containing C-terminal domain. CD42a is expressed by platelets and megakaryocytes and forms a covalent complex with CD42c (GP-1b-beta), CD42b (GP-1b-alpha) and CD42d (platelet glycoprotein V) to create the platelet surface receptor for von Willebrand factor. Incubation of the intact von Willebrand receptor complex with clone FMC-25 does not appear to inhibit binding of von Willebrand factor to the receptor (Yan et al. 2011). Defects in the GP1BB gene encoding human CD42a can lead to the inherited bleeding disorder Bernard-Soulier syndrome (Diz-Küçükkaya 2013), characterized by prolonged bleeding times, thrombocytopenia and the appearance of giant platelets in the circulation (Johns et al. 2014). Mouse anti human CD42a antibody, clone FMC-25 has been successfully used as a capture reagent for platelet-autoantibody complexes in the sera of patients presenting thrombocytopenia associated with anti-phospholipid syndrome (Godeau et al. 1997).
Tested Reactivity	Hu
Tested Application	FACS
Host	Mouse
Clonality	Monoclonal
Clone	FMC-25
Isotype	IgG1
Target Name	CD42a
Species	Human
Immunogen	Peripheral blood mononuclear cells.
Conjugation	FITC
Alternate Names	Glycoprotein 9; CD antigen CD42a; CD42a; GPIX; GP-IX; Platelet glycoprotein IX

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. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

Properties

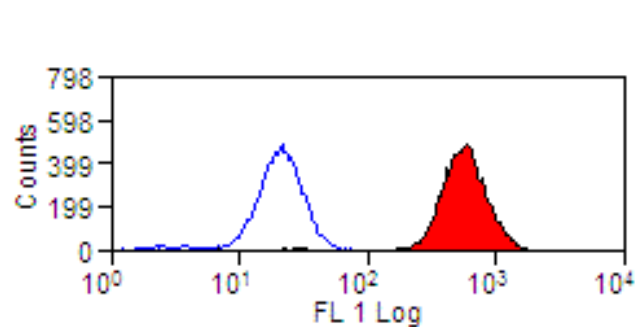
Form	Liquid
Purification	Purification with Protein G.

Buffer	PBS, 0.09% Sodium azide and 1% BSA
Preservative	0.09% Sodium azide
Stabilizer	1% BSA
Concentration	0.1 mg/ml
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	GP9
Gene Full Name	glycoprotein IX (platelet)
Background	This gene encodes a small membrane glycoprotein found on the surface of human platelets. It forms a 1-to-1 noncovalent complex with glycoprotein Ib, a platelet surface membrane glycoprotein complex that functions as a receptor for von Willebrand factor. The complete receptor complex includes noncovalent association of the alpha and beta subunits with the protein encoded by this gene and platelet glycoprotein V. Defects in this gene are a cause of Bernard-Soulier syndrome, also known as giant platelet disease. These patients have unusually large platelets and have a clinical bleeding tendency. [provided by RefSeq, Oct 2008]
Function	The GPIb-V-IX complex functions as the vWF receptor and mediates vWF-dependent platelet adhesion to blood vessels. The adhesion of platelets to injured vascular surfaces in the arterial circulation is a critical initiating event in hemostasis. GP-IX may provide for membrane insertion and orientation of GP-Ib. [UniProt]
Calculated Mw	19 kDa

Images



ARG23071 anti-CD42a antibody [FMC-25] (FITC) FACS image

Flow Cytometry: Human peripheral blood platelets stained with ARG23071 anti-CD42a antibody [FMC-25] (FITC).