ARG10114
anti-Fibrinogen antibody [1F3]

Package: 100 µg
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [1F3] recognizes Fibrinogen
Tested Reactivity	Hu
Tested Application	ELISA, WB
Specificity	Human fibrinogen and fibrin degradation products.
Host	Mouse
Clonality	Monoclonal
Clone	1F3
Isotype	IgG2b
Target Name	Fibrinogen
Species	Human
Immunogen	Fibrin degradation products.
Conjugation	Un-conjugated
Alternate Names	Fibrinogen alpha chain; Fib2

Application Instructions

Application table

Application	Dilution
ELISA	Assay-dependent
WB	Assay-dependent

Application Note: Sandwich ELISA (Capture antibody - Detection antibody): ARG10114 - ARG10362

* 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 (pH 7.4) and 0.09% Sodium azide.
Preservative	0.09% Sodium azide
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	FGA
Gene Full Name	fibrinogen alpha chain
Background	The protein encoded by this gene is the alpha component of fibrinogen, a blood-borne glycoprotein comprised of three pairs of nonidentical polypeptide chains. Following vascular injury, fibrinogen is cleaved by thrombin to form fibrin which is the most abundant component of blood clots. In addition, various cleavage products of fibrinogen and fibrin regulate cell adhesion and spreading, display vasoconstrictor and chemotactic activities, and are mitogens for several cell types. Mutations in this gene lead to several disorders, including dysfibrinogenemia, hypofibrinogenemia, afibrinogenemia and renal amyloidosis. Alternative splicing results in two isoforms which vary in the carboxy-terminus. [provided by RefSeq, Jul 2008]
Function	Cleaved by the protease thrombin to yield monomers which, together with fibrinogen beta (FGB) and fibrinogen gamma (FGG), polymerize to form an insoluble fibrin matrix. Fibrin has a major function in hemostasis as one of the primary components of blood clots. In addition, functions during the early stages of wound repair to stabilize the lesion and guide cell migration during re-epithelialization. Was originally thought to be essential for platelet aggregation, based on in vitro studies using anticoagulated blood. However, subsequent studies have shown that it is not absolutely required for thrombus formation in vivo. Enhances expression of SELP in activated platelets via an ITGB3-dependent pathway. Maternal fibrinogen is essential for successful pregnancy. Fibrin deposition is also associated with infection, where it protects against IFNG-mediated hemorrhage. May also facilitate the immune response via both innate and T-cell mediated pathways. [UniProt]
Calculated Mw	95 kDa
PTM	The alpha chain is normally not N-glycosylated (PubMed:23151259), even though glycosylation at Asn-686 was observed when a fragment of the protein was expressed in insect cells (PubMed:9689040). It is well known that heterologous expression of isolated domains can lead to adventitious protein modifications. Besides, glycosylation at Asn-686 is supported by large-scale glycoproteomics studies (PubMed:16335952 and PubMed:19159218), but the evidence is still quite tenuous. Most likely, Asn-686 is not glycosylated in the healthy human body, or only with low efficiency. O-glycosylated. Forms F13A-mediated cross-links between a glutamine and the epsilon-amino group of a lysine residue, forming fibronectin-fibrinogen heteropolymers. About one-third of the alpha chains in the molecules in blood were found to be phosphorylated. Conversion of fibrinogen to fibrin is triggered by thrombin, which cleaves fibrinopeptides A and B from alpha and beta chains, and thus exposes the N-terminal polymerization sites responsible for the formation of the soft clot. The soft clot is converted into the hard clot by factor XIIIA which catalyzes the epsilon-(gamma-glutamyl)lysine cross-linking between gamma chains (stronger) and between alpha chains (weaker) of different monomers. Phosphorylated by FAM20C in the extracellular medium. [UniProt]