10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

F13A1 Antibody (monoclonal) (M02)

Mouse monoclonal antibody raised against a full length recombinant F13A1.
Catalog # AT1976a

Specification

F13A1 Antibody (monoclonal) (M02) - Product Information

Application	**E**
Primary Accession	P00488
Other Accession	BC027963
Reactivity	**Human**
Host	**mouse**
Clonality	**Monoclonal**
Isotype	**IgG**
Calculated MW	**83268**

F13A1 Antibody (monoclonal) (M02) - Additional Information

Gene ID 2162

Other Names
Coagulation factor XIII A chain, Coagulation factor XIIIa, Protein-glutamine gamma-glutamyltransferase A chain, Transglutaminase A chain, F13A1, F13A

Target/Specificity
F13A1 (AAH27963, 1 a.a. ~ 732 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

Format
Clear, colorless solution in phosphate buffered saline, pH 7.2 .

Storage
Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Precautions
F13A1 Antibody (monoclonal) (M02) is for research use only and not for use in diagnostic or therapeutic procedures.

F13A1 Antibody (monoclonal) (M02) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation

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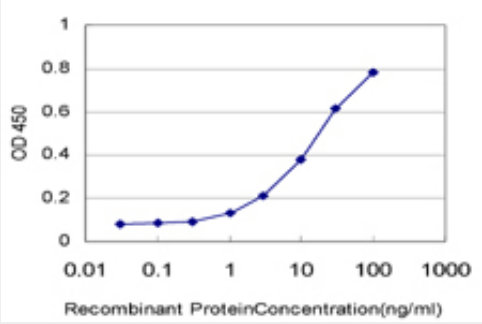
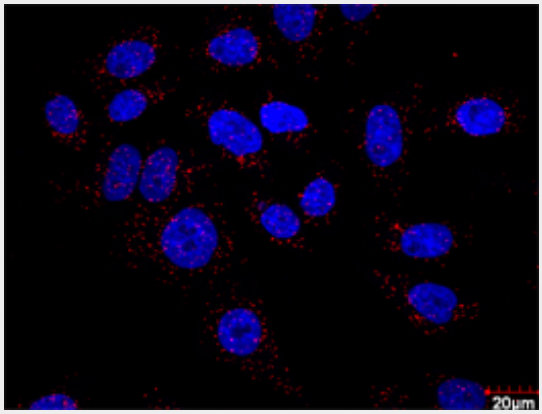
- Flow Cytomety
- Cell Culture

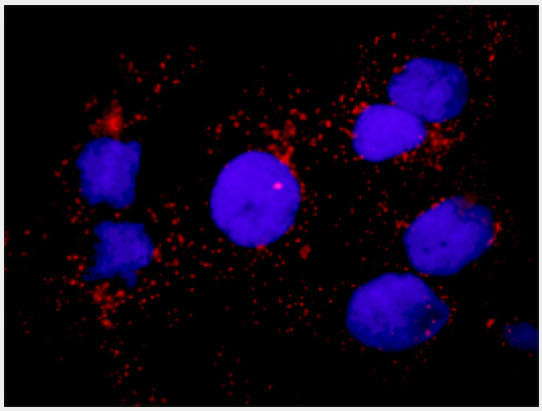
F13A1 Antibody (monoclonal) (M02) - Images



Detection limit for recombinant GST tagged F13A1 is approximately 0.3ng/ml as a capture antibody.



Proximity Ligation Analysis of protein-protein interactions between HSPB1 and F13A1 HeLa cells were stained with anti-HSPB1 rabbit purified polyclonal 1:100 and anti-F13A1 mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex, and nuclei were counterstained with DAPI (blue).



Proximity Ligation Analysis of protein-protein interactions between HSPB1 and F13A1. Huh7 cells were stained with anti-HSPB1 rabbit purified polyclonal 1:1200 and anti-F13A1 mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex, and nuclei were counterstained with DAPI (blue).

F13A1 Antibody (monoclonal) (M02) - Background

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This gene encodes the coagulation factor XIII A subunit. Coagulation factor XIII is the last zymogen to become activated in the blood coagulation cascade. Plasma factor XIII is a heterotetramer composed of 2 A subunits and 2 B subunits. The A subunits have catalytic function, and the B subunits do not have enzymatic activity and may serve as plasma carrier molecules. Platelet factor XIII is comprised only of 2 A subunits, which are identical to those of plasma origin. Upon cleavage of the activation peptide by thrombin and in the presence of calcium ion, the plasma factor XIII dissociates its B subunits and yields the same active enzyme, factor XIIIa, as platelet factor XIII. This enzyme acts as a transglutaminase to catalyze the formation of gamma-glutamyl-epsilon-lysine crosslinking between fibrin molecules, thus stabilizing the fibrin clot. It also crosslinks alpha-2-plasmin inhibitor, or fibronectin, to the alpha chains of fibrin. Factor XIII deficiency is classified into two categories: type I deficiency, characterized by the lack of both the A and B subunits; and type II deficiency, characterized by the lack of the A subunit alone. These defects can result in a lifelong bleeding tendency, defective wound healing, and habitual abortion.

F13A1 Antibody (monoclonal) (M02) - References

A genetic association study of maternal and fetal candidate genes that predispose to preterm prelabor rupture of membranes (PROM). Romero R, et al. Am J Obstet Gynecol, 2010 Jul 29. PMID 20673868.Maternal genes and facial clefts in offspring: a comprehensive search for genetic associations in two population-based cleft studies from Scandinavia. Jugessur A, et al. PLoS One, 2010 Jul 9. PMID 20634891.Variation at the NFATC2 Locus Increases the Risk of Thiazolinedinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. Diabetes Care, 2010 Jul 13. PMID 20628086.Allele-allele interaction within the F13A1 gene: a risk factor for ischaemic heart disease in Spanish population. Carreras-Torres R, et al. Thromb Res, 2010 Sep. PMID 20553949.Study of 18 functional hemostatic polymorphisms in mucocutaneous bleeding disorders. Ant?n Al, et al. Ann Hematol, 2010 Nov. PMID 20532885.