

Anti-Factor XIIIa antibody [AC-1A1] ab1834

[14 References](#) [5 Images](#)

Overview

Product name	Anti-Factor XIIIa antibody [AC-1A1]
Description	Mouse monoclonal [AC-1A1] to Factor XIIIa
Host species	Mouse
Tested applications	Suitable for: ELISA, ICC/IF, IHC-Fr, IHC-P, WB, Flow Cyt
Species reactivity	Reacts with: Mouse, Human
Immunogen	Recombinant fragment corresponding to Human Factor XIIIa. BALB/C mice were injected with recombinant human protein corresponding to A-subunit of coagulation Factor XIII.
Positive control	Placenta
General notes	This antibody recognizes both the dimer and monomer forms.
<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>	

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.3 Preservative: 0.05% Sodium azide Constituent: 1% BSA
Purity	IgG fraction
Clonality	Monoclonal
Clone number	AC-1A1
Isotype	IgG1

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab1834 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ELISA		Use at an assay dependent concentration.
ICC/IF		Use at an assay dependent concentration.
IHC-Fr		Use at an assay dependent concentration. This antibody may be diluted to a titer of 1/25 - 1/50 in an ABC method.
IHC-P		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Detects a band of approximately 83 kDa (predicted molecular weight: 83 kDa).
Flow Cyt		Use 1µg for 10 ⁶ cells. ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

Target

Function

Factor XIII is activated by thrombin and calcium ion to a transglutaminase that catalyzes the formation of gamma-glutamyl-epsilon-lysine cross-links between fibrin chains, thus stabilizing the fibrin clot. Also cross-link alpha-2-plasmin inhibitor, or fibronectin, to the alpha chains of fibrin.

Involvement in disease

Defects in F13A1 are the cause of factor XIII subunit A deficiency (FA13AD) [MIM:613225]. FA13AD is an autosomal recessive disorder characterized by a life-long bleeding tendency, impaired wound healing and spontaneous abortion in affected women.

Sequence similarities

Belongs to the transglutaminase superfamily. Transglutaminase family.

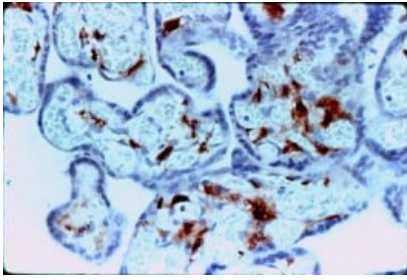
Post-translational modifications

The activation peptide is released by thrombin.

Cellular localization

Cytoplasm. Secreted. Secreted into the blood plasma. Cytoplasmic in most tissues, but also secreted in the blood plasma.

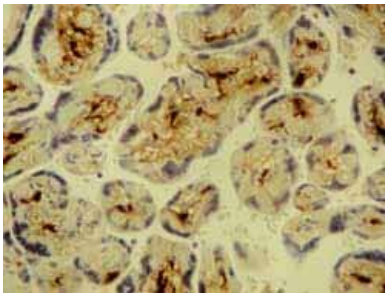
Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Factor XIIIa antibody [AC-1A1] (ab1834)

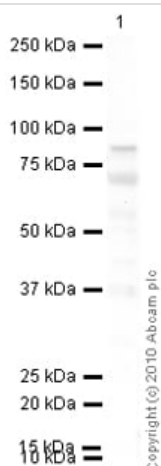
ab1834 - immunohistochemistry

Formalin fixed paraffin embedded human placenta stained with Factor XIIIa, using ABC and AEC chromogen.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Factor XIIIa antibody [AC-1A1] (ab1834)

ab1834 staining human placenta by IHC-P.



Western blot - Anti-Factor XIIIa antibody [AC-1A1] (ab1834)

Anti-Factor XIIIa antibody [AC-1A1] (ab1834) at 1/250 dilution + Human placenta tissue lysate - total protein at 10 µg

Secondary

Goat Anti-Mouse IgG H&L (HRP) preadsorbed ([ab97040](#)) at 1/5000 dilution

Developed using the ECL technique.

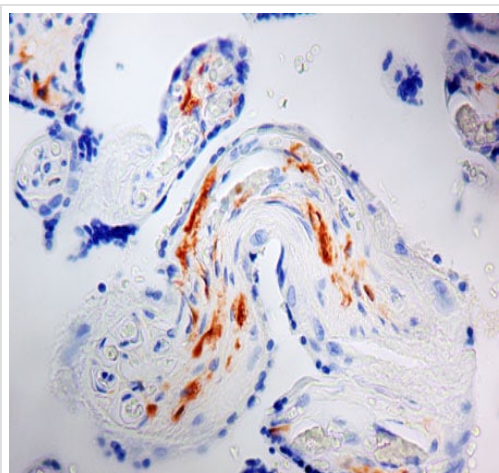
Performed under reducing conditions.

Predicted band size: 83 kDa

Observed band size: 83 kDa

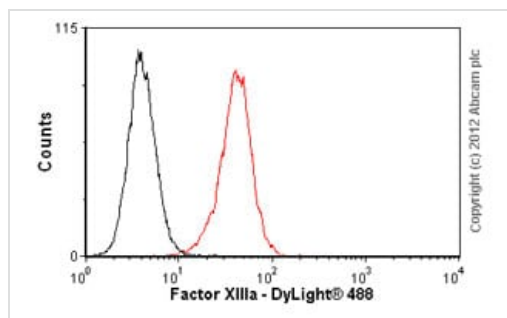
Additional bands at: 37 kDa, 74 kDa. We are unsure as to the identity of these extra bands.

Exposure time: 2 minutes



Immunohistochemical analysis of formalin-fixed, paraffin-embedded Human placenta tissue, staining Factor XIIIa with ab1834.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Factor XIIIa antibody [AC-1A1] (ab1834)



Flow Cytometry - Anti-Factor XIIIa antibody [AC-1A1] (ab1834)

Overlay histogram showing A549 cells stained with **ab16956** (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (**ab16956**, 1µg/1x10⁶ cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (**ab96879**) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] (**ab91353**, 2µg/1x10⁶ cells) used under the same conditions. Acquisition of >5,000 events was performed.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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