

Goat Anti-Factor XIIIa (703-717) Antibody Peptide-affinity purified goat antibody Catalog # AF1395a

### Specification

# Goat Anti-Factor XIIIa (703-717) Antibody - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Concentration Isotype Calculated MW WB, E <u>P00488</u> <u>NP\_000120</u>, <u>2162</u> Human Mouse Goat Polyclonal 100ug/200ul IgG 83268

# Goat Anti-Factor XIIIa (703-717) Antibody - Additional Information

Gene ID 2162

**Other Names** Coagulation factor XIII A chain, Coagulation factor XIIIa, 2.3.2.13, Protein-glutamine gamma-glutamyltransferase A chain, Transglutaminase A chain, F13A1, F13A

Dilution WB~~1:1000 E~~N/A

Format

0.5 mg lgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions** 

Goat Anti-Factor XIIIa (703-717) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

### Goat Anti-Factor XIIIa (703-717) Antibody - Protein Information

Name F13A1

Synonyms F13A



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.

#### **Cellular Location**

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

## Goat Anti-Factor XIIIa (703-717) Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Goat Anti-Factor XIIIa (703-717) Antibody - Images

-	250kDa 150kDa 100kDa
	75kDa
	50kDa
	37kDa
	25kDa
	20kDa
	15kDa

AF1395a (0.1  $\mu$ g/ml) staining of Human Placenta lysate (35  $\mu$ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

### Goat Anti-Factor XIIIa (703-717) Antibody - Background

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.

# Goat Anti-Factor XIIIa (703-717) Antibody - 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.

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