

Product datasheet for TA800305

OriGene Technologies, Inc.

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Factor XIIIa (F13A1) Mouse Monoclonal Antibody [Clone ID: OTI1H2]

Product data:

Product Type: Primary Antibodies

Clone Name: OTI1H2

Applications: IF, IHC, WB

Recommended Dilution: WB 1:2000, IHC 1:150, IF 1:100

Reactivity: Human, Mouse, Rat

Host: Mouse Isotype: IgG2a

Clonality: Monoclonal

Immunogen: Full length human recombinant protein of human F13A1 (NP_000120) produced in HEK293T

cell.

Formulation: PBS (pH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.

Concentration: 1 mg/ml

Purification: Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography

(protein A/G)

Conjugation: Unconjugated

Storage: Store at -20°C as received.

Stability: Stable for 12 months from date of receipt.

Predicted Protein Size: 79.2 kDa

Gene Name: coagulation factor XIII A chain

Database Link: NP 000120

Entrez Gene 60327 RatEntrez Gene 74145 MouseEntrez Gene 2162 Human

P00488





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. [provided by RefSeq]

Synonyms: F13A

Protein Families: Druggable Genome, Secreted Protein

Protein Pathways: Complement and coagulation cascades