

# **Product datasheet for TA800369S**

#### OriGene Technologies, Inc.

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## Factor XIIIa (F13A1) Mouse Monoclonal Antibody [Clone ID: OTI9E2]

#### **Product data:**

**Product Type:** Primary Antibodies

Clone Name: OTI9E2

**Applications:** FC, IF, IHC, WB

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

Reactivity: Human, Mouse, Rat

Host: Mouse Isotype: IgG1

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





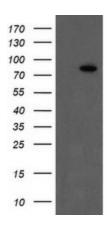
Background:

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

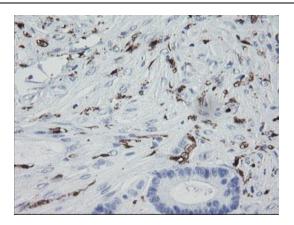
Protein Families: Druggable Genome, Secreted Protein
Protein Pathways: Complement and coagulation cascades

## **Product images:**

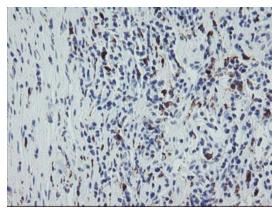


HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY F13A1 ([RC206464], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-F13A1. Positive lysates [LY400044] (100ug) and [LC400044] (20ug) can be purchased separately from OriGene.

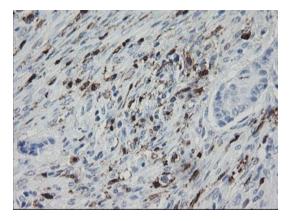




Immunohistochemical staining of paraffinembedded Adenocarcinoma of Human colon tissue using anti-F13A1 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA800369])

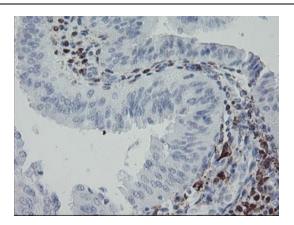


Immunohistochemical staining of paraffinembedded Carcinoma of Human kidney tissue using anti-F13A1 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA800369])

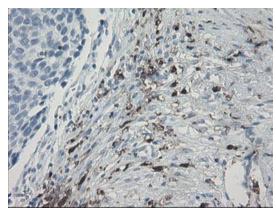


Immunohistochemical staining of paraffinembedded Carcinoma of Human lung tissue using anti-F13A1 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA800369])

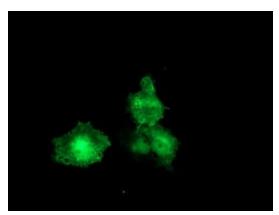




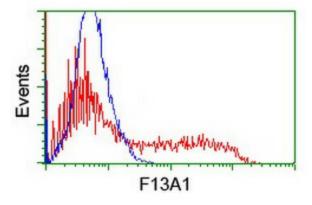
Immunohistochemical staining of paraffinembedded Adenocarcinoma of Human endometrium tissue using anti-F13A1 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA800369])



Immunohistochemical staining of paraffinembedded Carcinoma of Human bladder tissue using anti-F13A1 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA800369])



Anti-F13A1 mouse monoclonal antibody ([TA800369]) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY F13A1 ([RC206464]).



HEK293T cells transfected with either [RC206464] overexpress plasmid (Red) or empty vector control plasmid (Blue) were immunostained by anti-F13A1 antibody ([TA800369]), and then analyzed by flow cytometry.