

# **Product datasheet for CF807219**

#### OriGene Technologies, Inc.

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## Factor XII (F12) Mouse Monoclonal Antibody [Clone ID: OTI1H5]

#### **Product data:**

**Product Type:** Primary Antibodies

Clone Name: OTI1H5

Applications: IHC

Recommended Dilution: IHC 1:150

Reactivity: Human Host: Mouse

**Isotype:** IgG1

Clonality: Monoclonal

**Immunogen:** Human recombinant protein fragment corresponding to amino acids 73-372 of human

F12(NP\_000496) produced in E.coli.

Formulation: Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)

**Reconstitution Method:** For reconstitution, we recommend adding 100uL distilled water to a final antibody

concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)

**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.

**Gene Name:** coagulation factor XII

Database Link: NP 000496

Entrez Gene 2161 Human

P00748





Background:

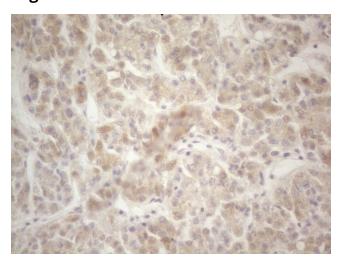
This gene encodes coagulation factor XII which circulates in blood as a zymogen. This single chain zymogen is converted to a two-chain serine protease with an heavy chain (alpha-factor XIIa) and a light chain. The heavy chain contains two fibronectin-type domains, two epidermal growth factor (EGF)-like domains, a kringle domain and a proline-rich domain, whereas the light chain contains only a catalytic domain. On activation, further cleavages takes place in the heavy chain, resulting in the production of beta-factor XIIa light chain and the alpha-factor XIIa light chain becomes beta-factor XIIa heavy chain. Prekallikrein is cleaved by factor XII to form kallikrein, which then cleaves factor XII first to alpha-factor XIIa and then to beta-factor XIIa. The active factor XIIa participates in the initiation of blood coagulation, fibrinolysis, and the generation of bradykinin and angiotensin. It activates coagulation factors VII and XI. Defects in this gene do not cause any clinical symptoms and the sole effect is that whole-blood clotting time is prolonged. [provided by RefSeq, Jul 2008]

Synonyms: HAE3; HAEX; HAF

**Protein Families:** Druggable Genome, Protease, Secreted Protein

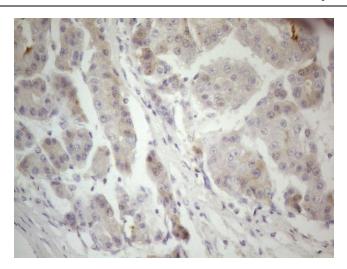
**Protein Pathways:** Complement and coagulation cascades

## **Product images:**



Immunohistochemical staining of paraffinembedded Human liver tissue using anti-F12 mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.5) at 120°C for 3min, [TA807219]) (1:150)





Immunohistochemical staining of paraffinembedded Carcinoma of Human liver tissue using anti-F12 mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.5) at 120°C for 3min, [TA807219]) (1:150)