

Product Datasheet

F12 - Coagulation factor XII GRP13226

Species/Host	Chicken
Reactivity	Human
Predicted Reactivity	Human
Immunogen	purified full length native protein UnniProt:P00748
Form/Appearance	Liquid in 0.9% NaCl, 0.1% sodium azide
Storage	Store at 4°C; make aliquots to avoid working with a stock. Please, remember to spin tubes briefly prior to opening them to avoid any losses that might occur from liquid material adhering to the cap or sides of the tubes.
Note	For research use only.
Clonality	Polyclonal
Purity	Total IgY fraction
MW	67 kDa
Uniprot ID	P00748
Dilution Range	1: 10 000 (ELISA)
Application Notes	<p>Additional Information: Detects human coagulation factor XII and XIIa.</p> <p>Background: Coagulation factor XII 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 Factor XII gene do not cause any apparent clinical symptoms and the sole effect is that whole blood clotting time is prolonged.</p>