

# FACTOR FVIIIc

<b>Description</b>	Factor VIII (FVIII) is an essential blood clotting factor also known as anti-hemophilic factor (AHF). Defects in this gene results in hemophilia A, a well known recessive X-linked coagulation disorder. Functional protein is measured using a modified APTT system.
<b>Indication</b>	Family history of Haemophilia A, Prolonged or shortened APTT.
<b>Additional Info</b>	<p>FVIII is a glycoprotein procofactor. It has been found to be synthesized and released into the bloodstream by the vascular, glomerular, and tubular endothelium, and the sinusoidal cells of the liver, though there is still considerable ambiguity as to what the primary site of release in humans is. In the circulating blood, it is mainly bound to von Willebrand factor to form a stable complex. Upon activation by thrombin, (Factor IIa), it dissociates from the complex to interact with Factor IXa in the coagulation cascade. It is a cofactor to Factor IXa in the activation of Factor X, which, in turn, with its cofactor Factor Va, activates more thrombin. Thrombin cleaves fibrinogen into fibrin which polymerizes and crosslinks (using Factor XIII) into a blood clot.</p> <p>No longer protected by vWF, activated FVIII is proteolytically inactivated in the process (most prominently by activated Protein C and Factor IXa) and quickly cleared from the blood stream.</p> <p>Factor VIII is not affected by liver disease. In fact, levels usually are elevated in such instances.</p>
<b>Concurrent Tests</b>	Run as part of a von Willibrand screen.
<b>Interpretation</b>	Factor VIIIc is an acute phase reactant, so care needs to be taken in it's interpretation as mild deficiency can be masked during an acute episode.
<b>Collection Conditions</b>	Samples must be correctly filled as the ratio of anticoagulant to blood is crucial for accurate test results. Samples will be rejected by the laboratory if they are under or over filled. Samples should arrive in the laboratory within 4 hours of blood draw.
<b>Frequency Of Testing</b>	As required.
<b>Clinical Advice/Contact</b>	Haematology Registrar.