abcam

Product datasheet

Factor X Human Chromogenic Activity Assay Kit ab108833

1 References 5 图像

概述

产品名称 Factor X人Chromogenic Activity Assay试剂盒

检**测方法** Colorimetric

样品类型 Cell culture supernatant, Plasma检測类型 Enzyme activity (quantitative)

灵敏度 = 0.009 μg/ml

范围 0.016 μg/ml - 4 μg/ml

种属反应性 与反应: Human

产品概述 Factor X Human Chromogenic Activity Assay Kit (ab108833) is developed to determine human

Factor X activity in plasma and cell culture. The assay measures the activation of zymogen Factor X to Factor Xa by RVV. The amidolytic activity of the Factor Xa is quantitated using a highly specific Factor Xa substrate releasing a yellow para-nitroaniline (pNA) chromophore. The change in absorbance of the pNA at 405 nm is directly proportional to the Factor X enzymatic activity.

High level of FX activity samples: range of 0.125-8 μ g/ml Low level of FX activity samples: range of 0.0156-1 μ g/ml

The entire kit may be stored at -20°C for long term storage before reconstitution - Avoid repeated freeze-thaw cycles.

Factor X is a plasma serine protease zymogen involved in the blood coagulation cascade. Factor X is purified from plasma as a two-chain protein consisting of a 45-kDa heavy chain and a 17-

kDa light chain. The Factor X heavy chain is cleaved during coagulation by several different proteases including the intrinsic Xase complex, the Factor X-activating enzyme from Russell's viper venom (RVV) and trypsin, and also by extrinsic (tissue Factor/Factor VIIa) pathway to give an active enzyme Factor Xa. Factor Xa as the activator of prothrombin occupies a central position

linking the two blood coagulation pathways.

平台 Microplate reader

性能

说明

1

存放说明

Store at -20°C. Please refer to protocols.

组 件	100 tests
Assay Diluent	1 x 5ml
Factor X Standard	1 unit
Factor Xa Substrate	2 vials
Microplate	1 unit
RVV	1 vial
Sample Diluent	1 x 5ml
Sealing Tapes	3 units

功能 Factor Xa is a vitamin K-dependent glycoprotein that converts prothrombin to thrombin in the

presence of factor Va, calcium and phospholipid during blood clotting.

组织特异性 Plasma; synthesized in the liver.

疾病相关 Defects in F10 are the cause of factor X deficiency (FA10D) [MIM:227600]. A hemorrhagic

disease with variable presentation. Affected individuals can manifest prolonged nasal and

mucosal hemorrhage, menorrhagia, hematuria, and occasionally hemarthrosis. Some patients do

not have clinical bleeding diathesis.

序列相似性 Belongs to the peptidase S1 family.

Contains 2 EGF-like domains.

Contains 1 Gla (gamma-carboxy-glutamate) domain.

Contains 1 peptidase S1 domain.

翻译后修饰 The vitamin K-dependent, enzymatic carboxylation of some glutamate residues allows the

modified protein to bind calcium.

N- and O-glycosylated.

The activation peptide is cleaved by factor IXa (in the intrinsic pathway), or by factor VIIa (in the

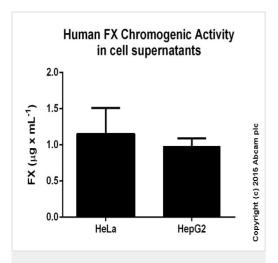
extrinsic pathway).

The iron and 2-oxoglutarate dependent 3-hydroxylation of aspartate and asparagine is (R)

stereospecific within EGF domains.

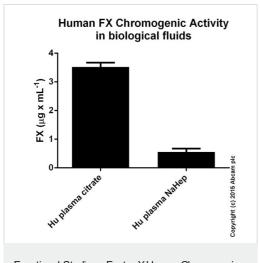
细胞定位 Secreted.

图片

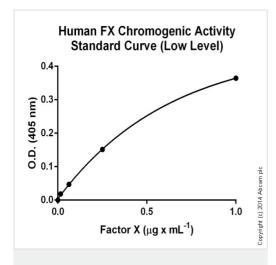


Factor X Chromogenic Activity measured in cell culture supernatants showing quantity (ug) per mL of tested sample after 40 min of incubation. Values calculated based on Low Level Standard Curve. Samples were diluted 2-10 fold.



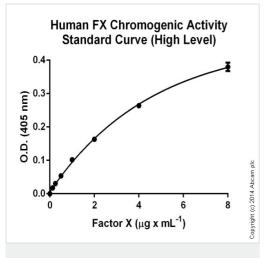


Functional Studies - Factor X Human Chromogenic Activity Assay Kit (ab108833) Factor X Chromogenic Activity measured in biological fluids showing quantity (ug) per mL of tested sample after 10 min of incubation. Values calculated based on High Level Standard Curve. Samples were diluted 2 fold.

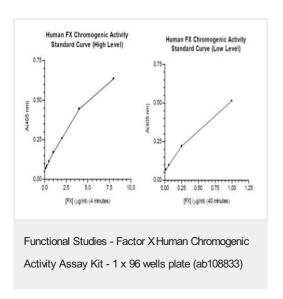


Standard curve: mean of duplicates (+/- SD) with background reads subtracted

Functional Studies - Factor X Human Chromogenic Activity Assay Kit (ab108833)



Functional Studies - Factor X Human Chromogenic Activity Assay Kit (ab108833) Standard curve: mean of duplicates (+/- SD) with background reads subtracted



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