abcam

Product datasheet

Factor Xa Activity Assay Kit (Fluorometric) ab204711

1 Abreviews 2 Images

Overview

Product name	Factor Xa Activity Assay Kit (Fluorometric)
Detection method	Fluorescent
Sample type	Plasma, Purified protein
Assay type	Enzyme activity
Sensitivity	< 1 ng
Assay time	0h 40m
Product overview	Factor Xa Activity Assay Kit (Fluorometric) (ab204711) utilizes the ability of Factor Xa to cleave a synthetic substrate thereby releasing a fluorophore, AMC, which can be quantified by fluorescence readers. This assay kit is simple, rapid and can detect Factor Xa activity as low as 1 ng. Factor Xa activity assay protocol summary: - add samples and standards to wells - add reaction mix - analyze with microplate reader for 30-60 min every 2-3 min For plasma samples, citrate plasma or heparin plasma is recommended as EDTA may interfere with the enzymatic assay.
Notes	This product is manufactured by BioVision, an Abcam company and was previously called K361 Factor Xa Activity Fluorometric Assay Kit. K361-100 is the same size as the 100 test size of ab204711. Factor Xa (FXa) is the activated form of the coagulation factor X (Stuart-Power factor, thrombokinase, prothrombinase, thromboplastin, E.C.3.4.21.6). Factor X, a serine endopeptidase plays an important role at several stages of the coagulation pathway. It acts by converting prothrombin into active thrombin by complexing with activated co-factor V in the prothrombinase complex. Unfractionated heparin and various low molecular weight heparins bind to plasma cofactor antithrombin to inactivate several coagulation factors including factor Xa.
Platform	Microplate reader

Properties

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

Components	100 tests
FXa Assay Buffer	1 x 15ml
FXa Dilution Buffer	1 x 1ml
FXa Enzyme	1 x 5µl
FXa Substrate	1 x 200µl

Function 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.

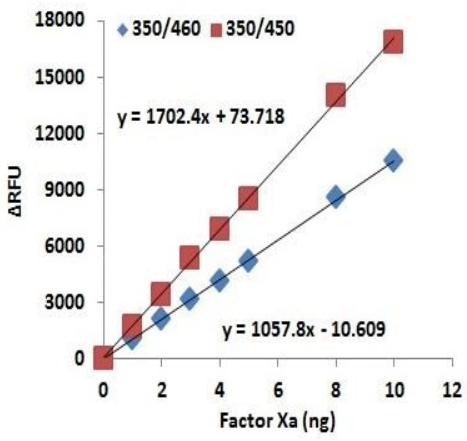
Tissue specificity Plasma; synthesized in the liver.

Sequence similarities Belongs to the peptidase S1 family.
Contains 2 EGF-like domains.
Contains 1 Gla (gamma-carboxy-glutamate) domain.
Contains 1 peptidase S1 domain.

Post-translational modifications 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.

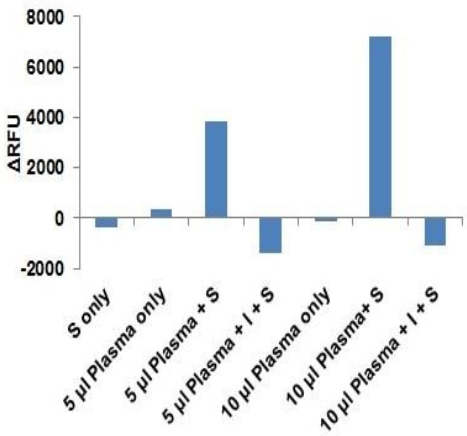
Cellular localization Secreted.

Images



Factor Xa Activity Assay Kit (Fluorometric) (ab204711)

Standard plot of FXa activity measured at two different emission wavelengths (450 and 460 nm) keeping the excitation at 350 nm.



FXa activity was measured in plasma samples in the presence and absence of a FXa inhibitor, GGACK Dihydrochloride. S = Substrate, I = Inhibitor.

Factor Xa Activity Assay Kit (Fluorometric) (ab204711)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit **https://www.abcam.com/abpromise** or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors