abcam

Product datasheet

Rat Plasminogen ELISA Kit ab157740

1 References 1 Image

Overview

Precision

Recovery

Product name Rat Plasminogen ELISA Kit

Detection method Colorimetric

Sample	n	Mean	SD	CV%
Overall				< 10%

Inter-assay

Sample specific recovery

Intra-assav

Sample	n	Mean	SD	CV%
Overall				< 10%

Sample type Serum, Plasma

Assay type Sandwich (quantitative)

Sensitivity 3.24 ng/ml

Range 3.13 ng/ml - 200 ng/ml

7.10 lig/iii 200 lig/iii

Sample type	Average %	Range
Serum	> 85	% - %

Assay duration Multiple steps standard assay

Species reactivity Reacts with: Rat

Product overview Abcam's Plasminogen Rat ELISA Kit is a two-site enzyme-linked immunosorbent assay (ELISA)

for the quantitative measurement of Plasminogen levels in rat serum and plasma.

In this assay the Plasminogen present in samples reacts with the anti-Plasminogen antibodies which have been adsorbed to the surface of polystyrene microtitre wells. After the removal of unbound proteins by washing, anti-Plasminogen antibodies conjugated with horseradish peroxidase (HRP), are added. These enzyme-labeled antibodies form complexes with the previously bound Plasminogen. Following another washing step, the enzyme bound to the

1

immunosorbent is assayed by the addition of a chromogenic substrate, 3,3',5,5'-tetramethylbenzidine (TMB). The quantity of bound enzyme varies directly with the concentration of Plasminogen in the sample tested; thus, the absorbance, at 450 nm, is a measure of the concentration of Plasminogen in the test sample. The quantity of Plasminogen in the test sample can be interpolated from the standard curve constructed from the standards, and corrected for sample dilution.

Platform

Microplate

Properties

Storage instructions

Store at +4°C. Please refer to protocols.

Components	1 x 96 tests
100X HRP-conjugated anti-rat Plasminogen antibody	1 x 150µl
20X Wash Buffer Concentrate	1 x 50ml
5X Diluent Concentrate	1 x 50ml
Chromogen Substrate Solution	1 x 12ml
Rat Plasminogen Calibrator (lyophilized)	1 vial
Rat Plasminogen ELISA Microplate	12 x 8 tests
Stop Solution	1 x 12ml

Function

Plasmin dissolves the fibrin of blood clots and acts as a proteolytic factor in a variety of other processes including embryonic development, tissue remodeling, tumor invasion, and inflammation. In ovulation, weakens the walls of the Graafian follicle. It activates the urokinase-type plasminogen activator, collagenases and several complement zymogens, such as C1 and C5. Cleavage of fibronectin and laminin leads to cell detachment and apoptosis. Also cleaves fibrin, thrombospondin and von Willebrand factor. Its role in tissue remodeling and tumor invasion may be modulated by CSPG4. Binds to cells.

Angiostatin is an angiogenesis inhibitor that blocks neovascularization and growth of experimental primary and metastatic tumors in vivo.

Tissue specificity Involvement in disease

Present in plasma and many other extracellular fluids. It is synthesized in the liver.

Defects in PLG are a cause of susceptibility to thrombosis (THR) [MIM:188050]. It is a multifactorial disorder of hemostasis characterized by abnormal platelet aggregation in response to various agents and recurrent thrombi formation.

Defects in PLG are the cause of plasminogen deficiency (PLGD) [MIM:217090]. PLGD is characterized by decreased serum plasminogen activity. Two forms of the disorder are distinguished: type 1 deficiency is additionally characterized by decreased plasminogen antigen levels and clinical symptoms, whereas type 2 deficiency, also known as dysplasminogenemia, is characterized by normal, or slightly reduced antigen levels, and absence of clinical manifestations. Plasminogen deficiency type 1 results in markedly impaired extracellular fibrinolysis and chronic mucosal pseudomembranous lesions due to subepithelial fibrin deposition and inflammation. The most common clinical manifestation of type 1 deficiency is ligneous conjunctivitis in which pseudomembranes formation on the palpebral surfaces of the eye progresses to white, yellow-

white, or red thick masses with a wood-like consistency that replace the normal mucosa.

Sequence similaritiesBelongs to the peptidase S1 family. Plasminogen subfamily.

Contains 5 kringle domains. Contains 1 PAN domain.

Contains 1 peptidase S1 domain.

Domain Kringle domains mediate interaction with CSPG4.

Post-translational N-linked glycan contains N-acetyllactosamine and sialic acid. O-linked glycans consist of Gal-

modifications GalNAc disaccharide modified with up to 2 sialic acid residues (microheterogeneity).

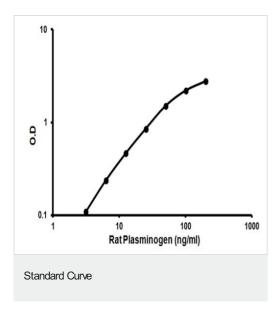
In the presence of the inhibitor, the activation involves only cleavage after Arg-580, yielding two chains held together by two disulfide bonds. In the absence of the inhibitor, the activation involves

additionally the removal of the activation peptide.

Cellular localization Secreted. Locates to the cell surface where it is proteolytically cleaved to produce the active

plasmin. Interaction with HRG tethers it to the cell surface.

Images



Representative standard curve using ab157740 Plasminogen Rat ELISA Kit

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