# abcam

### Product datasheet

## Rat PAI1 ELISA Kit (SERPINE1) ab201283

重组 SimpleStep ELISA

2 References 5 图像

概述

产品名称 大鼠PAI1 ELISA试剂盒(SERPINE1)

检测方法 Colorimetric

精确度

样品	n	Mean	SD	CV%
rat serum	5			1.6%

批次间

批次内

样品	n	Mean	SD	CV%	
rat serum	3			3.3%	

样品类型 Cell culture supernatant, Urine, Serum, Cit plasma

检测类型 Sandwich (quantitative)

灵敏度 159 pg/ml

范围 298 pg/ml - 5000 pg/ml

回收率 特定样本回收率

样品类型	平均%	范围
Urine	80	69% - 88%
Serum	100	94% - 105%
Cell culture media	99	98% - 102%
Cit plasma	85	84% - 87%
serum free media	95	91% - 98%

检测时间 1h 30m

实验步骤 One step assay

#### 种属反应性

#### 产品概述

与反应: Mouse, Rat

Rat PAI1 ELISA Kit (SERPINE1) (ab201283) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of PAI1 (SERPINE1) protein in cell culture supernatant, cit plasma, serum, and urine. It uses our proprietary SimpleStep ELISA® technology. Quantitate Rat PAI1 (SERPINE1) with 159 pg/ml sensitivity.

SimpleStep ELISA® technology employs capture antibodies conjugated to an affinity tag that is recognized by the monoclonal antibody used to coat our SimpleStep ELISA® plates. This approach to sandwich ELISA allows the formation of the antibody-analyte sandwich complex in a single step, significantly reducing assay time. See the SimpleStep ELISA® protocol summary in the image section for further details. Our SimpleStep ELISA® technology provides several benefits:

- Single-wash protocol reduces assay time to 90 minutes or less
- High sensitivity, specificity and reproducibility from superior antibodies
- Fully validated in biological samples
- 96-wells plate breakable into 12 x 8 wells strips

A 384-well SimpleStep ELISA® microplate (<u>ab203359</u>) is available to use as an alternative to the 96-well microplate provided with SimpleStep ELISA® kits.

说明

Plasminogen activator inhibitor-1 (PAI1 or Serpin E1) is encoded by the Serpine1 gene. PAI1 is a serine protease inhibitor with a major role in the regulation of fibrinolysis. PAI1 is the principal inhibitor of tissue plasminogen activator (tPA) and urokinase (uPA), both of which are activators of plasminogen. PAI1 is a secreted protein produced by the endothelium as well as adipose tissue.

平台

Microplate

#### 性能

#### 存放说明

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

组 <b>件</b>	1 x 96 tests	10 x 96 tests
10X Rat PAI1 Capture Antibody	1 x 600µl	1 x 6000µl
10X Rat PAI1 Detector Antibody	1 x 600µl	1 x 6000µl
10X Wash Buffer PT (ab206977)	1 x 20ml	1 x 200ml
Antibody Diluent 4BI	1 x 6ml	10 x 6ml
Plate Seals	1 unit	1 x 10 units
Rat PAI1 Lyophilized Recombinant Protein	2 vials	2 x 10 vials
Sample Diluent NS (ab193972)	1 x 50ml	2 x 250ml
SimpleStep Pre-Coated 96-Well Microplate (ab206978)	1 unit	1 x 10 units

组 <b>件</b>	1 x 96 tests	10 x 96 tests
Stop Solution	1 x 12ml	1 x 120ml
TMB Development Solution	1 x 12ml	1 x 120ml

功能

This inhibitor acts as 'bait' for tissue plasminogen activator, urokinase, and protein C. Its rapid interaction with TPA may function as a major control point in the regulation of fibrinolysis.

组织特异性

Found in plasma and platelets and in endothelial, hepatoma and fibrosarcoma cells.

疾病相关

Defects in SERPINE1 are the cause of plasminogen activator inhibitor-1 deficiency (PAI-1D) [MIM:613329]. It is a hematologic disorder characterized by increased bleeding after trauma, injury, or surgery. Affected females have menorrhagia. The bleeding defect is due to increased fibrinolysis of fibrin blood clots due to deficiency of plasminogen activator inhibitor-1, which inhibits tissue and urinary activators of plasminogen.

 $\label{eq:Note-High concentrations} \text{ of SERPINE1 seem to contribute to the development of venous but not}$ 

arterial occlusions.

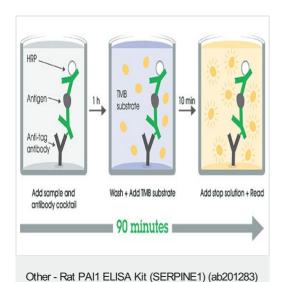
序列相似性 Belongs to the serpin family.

翻译后修饰 Inactivated by proteolytic attack of the urokinase-type (u-PA) and the tissue-type (TPA), cleaving

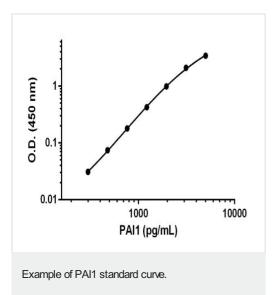
the 369-Arg--Met-370 bond.

细胞定位 Secreted.

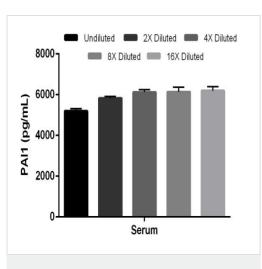
#### 图片



SimpleStep ELISA technology allows the formation of the antibodyantigen complex in one single step, reducing assay time to 90 minutes. Add samples or standards and antibody mix to wells all at once, incubate, wash, and add your final substrate. See protocol for a detailed step-by-step guide.

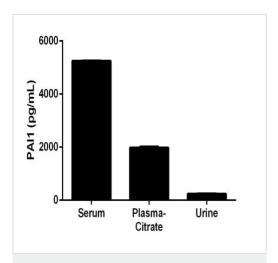


Background-subtracted data values (mean +/- SD) are graphed.



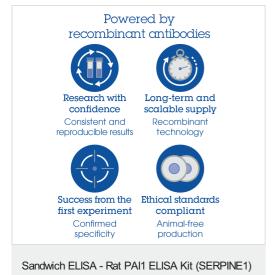
The concentrations of PAI1 were measured in duplicate and interpolated from the PAI1 standard curve and corrected for sample dilution. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean PAI1 concentration was determined to be 5,897 pg/mL in mouse serum.

Interpolated concentrations of PAI1 in rat serum.



The concentrations of PAI1 were measured in duplicate and interpolated from the PAI1 standard curve and corrected for sample dilution. The Interpolated dilution factor corrected values are plotted (mean+/- SD, n=2).

Interpolated Concentration of PAI1 in rat serum, plasma-citrate, and urine.



(ab201283)

To learn more about the advantages of recombinant antibodies see **here**.

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