# abcam

## Product datasheet

## Urokinase type Plasminogen Activator Human Chromogenic Activity Assay Kit ab108915

2 References 3 Images

Overview

Product name Urokinase type Plasminogen Activator Human Chromogenic Activity Assay Kit

**Detection method**Colorimetric

Sample type Cell culture supernatant, Serum, Plasma, Tissue, Cell Lysate

**Assay type** Enzyme activity (quantitative)

Sensitivity 0.0051 U/ml

Species reactivity Reacts with: Human

Product overview Urokinase type plasminogen activator (uPA) is a highly restricted serine protease that converts

the zymogen plasminogen to active plasmin, a broad-spectrum serine proteinase capable of degrading most of the major protein components of the extracellular matrix. Binding of uPA to its receptor and subsequent uPA mediated pericellular proteolysis are involved in many process including cell migration and tissue remodelling in angiogenesis, atherogenesis, tumor cell metastasis, and ovulation. High level of uPA is a poor prognostic marker for aggressive breast

cancer, aggressive prostate cancer, bladder cancer and gastric cancer.

ab108915 uPA Human Chromogenic Activity Assay Kit is developed to determine Human uPA activity in plasma and cell culture supernatants. The assay measures the ability of uPA to activate the plasminogen to plasmin in coupled or indirect assays that contain uPA, plasminogen, and a plasmin-specific synthetic substrate. The amount of plasmin produced is quantitated using a highly specific plasmin substrate releasing a yellow para-nitroaniline (pNA) chromophore. The change in absorbance of the pNA in the reaction solution at 405 nm is directly proportional to the

uPA enzymatic activity.

The entire kit may be stored at -20°C for long term storage before reconstitution - Avoid

repeated freeze-thaw cycles.

**Platform** Microplate reader

**Properties** 

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#### Storage instructions

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

Components	100 tests
Assay Diluent	1 x 30ml
Human Plasminogen	1 x 2 vials
Human uPA Standard	1 vial
Microplate	1 unit
Plasmin Substrate	1 x 2 vials
Sealing Tapes	3 units

**Function** Specifically cleave the zymogen plasminogen to form the active enzyme plasmin.

**Tissue specificity** Expressed in the prostate gland and prostate cancers.

**Sequence similarities** Belongs to the peptidase S1 family.

Contains 1 EGF-like domain. Contains 1 kringle domain.

Contains 1 peptidase S1 domain.

Post-translational

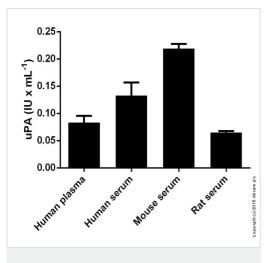
modifications

Phosphorylation of Ser-158 and Ser-323 abolishes proadhesive ability but does not interfere with

receptor binding.

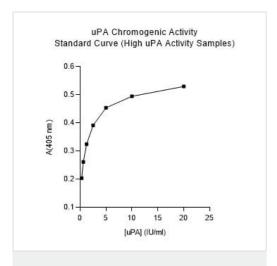
Cellular localization Secreted.

#### **Images**

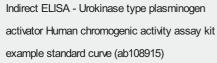


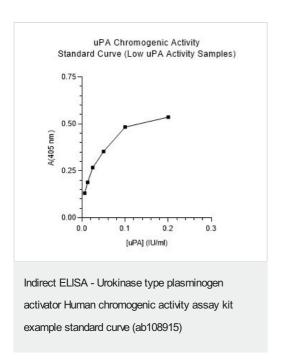
Indirect ELISA - Urokinase type plasminogen activator Human Chromogenic Activity Assay Kit (ab108915)

uPA measured in biologicals showing quantity (IU) per mL of sample tested.



uPA Chromogenic Activity Standard Curve (For High uPA Activity Samples)





uPA Chromogenic Activity Standard Curve (For Low uPA Activity Samples)

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