

## SERPINE1:PLAU

## **Human PAI1:uPA Complex ELISA Kit**

Catalog No. CSI19811A Quantity: 1x96 tests

CSI19811B 5x96 tests

Alternate Names: PAI, PAI1, PAI-1, PLANH1, SERPINE1, ATF, UPA, URK, u-PA, PLAU

**Description:** Plasminogen Activator Inhibitor 1 (PAI1) is the principal inhibitor of Tissue Plasminogen

Activator (tPA) and Urokinase (uPA), the activators of Plasminogen and hence

fibrinolysis. It is a serine protease inhibitor (serpin) protein (SERPINE1). PAI1 is mainly produced by the endothelium, but is also secreted by other tissue types, such as adipose

tissue.

Urokinase Plasminogen Activator (uPA) is a serine protease involved in degradation of the extracellular matrix and possibly tumor cell migration and proliferation. A specific polymorphism in this gene may be associated with late-onset Alzheimer's disease and also with decreased affinity for fibrin-binding. This protein converts Plasminogen to Plasmin by specific cleavage of an Arg-Val bond in Plasminogen. Plasmin in turn cleaves this protein at a Lys-lle bond to form a two-chain derivative in which a single disulfide bond connects the amino-terminal A-chain to the catalytically active, carboxy-terminal B-chain. This two-chain derivative is also called HMW-uPA (High Molecular Weight uPA). HMW-uPA can be further processed into LMW-uPA (Low Molecular Weight uPA) by cleavage of chain A into a short chain A (A1) and an ATF-uPA (Amino-Terminal

Fragment uPA). LMW-uPA is proteolytically active but does not bind to the uPA Receptor

(uPAR).

Urokinase Plasminogen Activator (uPA/PLAU) is a serine protease that activates Plasminogen to Plasmin in the blood fibrinolytic system. It is also implicated in events

related to cell invasion/migration. Plasminogen Activator Inhibitor type 1

(PAI1/SERPINE1) is involved in the regulation of the blood fibrinolytic system and forms

a 1:1 covalent complex with uPA and Tissue Plasminogen Activator (tPA/PLAT).

**Range:** 0.1-100 ng/mL

Sample Types: Samples of Human plasma, serum, urine, cell culture media, or tissue extracts.

Sample Size: 100 µl

Kit Content: Pre-coated 96-well plate, Anti-Human PAI1 primary antibody, HRP-conjugated secondary

antibody, Human PAI1:uPA complex standard, buffers, TMB.

**Storage & Stability:** Store kit components at 4°C. Store unopened plate and any unused microtiter strips in

the pouch with desiccant. Reconstituted standards and primary antibody may be stored at -70°C for later use. **DO NOT freeze/thaw the standards and primary antibody more than once.** All other unused kit components must be stored at 4°C. Kit should be

used no later than the expiration date.

NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

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