ARG83216
Human tPA ELISA Kit (Rapid One-Step)

Package: 96 wells
Store at: 4°C

Summary

Product Description	ARG83216 Human tPA ELISA Kit (Rapid One-Step) is an Enzyme Immunoassay kit for the quantification of Human tPA in Serum, Plasma, Urine and Cell culture supernatants. It is a rapid One-step 90 minutes protocol.
Tested Reactivity	Hu
Tested Application	ELISA
Specificity	There is no detectable cross-reactivity with other relevant proteins.
Target Name	tPA
Conjugation	HRP
Conjugation Note	Substrate: TMB and read at 450 nm.
Sensitivity	15 pg/ml
Detection Range	31.2 pg/ml - 2,000 pg/ml
Sample Type	Serum, Plasma, Urine and Cell culture supernatants
Precision	Intra-Assay CV: 5.7% Inter-Assay CV: 6.3%
Alternate Names	TPA; tPA; T-PA; t-plasminogen activator; t-PA; Tissue-type plasminogen activator; EC 3.4.21.68; Reteplase; Alteplase

Application Instructions

Assay Time	~ 1.5 hours

Properties

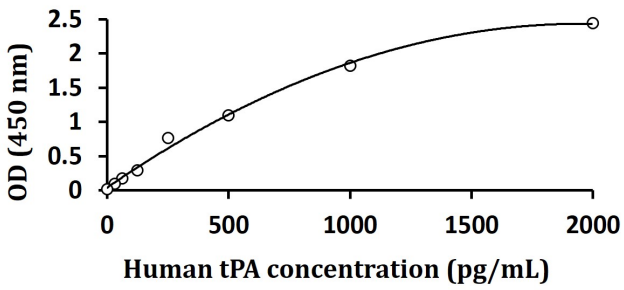
Form	96 well
Storage instruction	Store the kit at 2-8°C. Keep microplate wells sealed in a dry bag with desiccants. Do not expose test reagents to heat, sun or strong light during storage and usage. Please refer to the product user manual for detail temperatures of the components.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	PLAT
Gene Full Name	plasminogen activator, tissue
Background	This gene encodes tissue-type plasminogen activator, a secreted serine protease which converts the proenzyme plasminogen to plasmin, a fibrinolytic enzyme. Tissue-type plasminogen activator is synthesized as a single chain which is cleaved by plasmin to a two chain disulfide linked protein. This enzyme plays a role in cell migration and tissue remodeling. Increased enzymatic activity causes

	hyperfibrinolysis, which manifests as excessive bleeding; decreased activity leads to hypofibrinolysis which can result in thrombosis or embolism. Alternative splicing of this gene results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Jul 2008]
Function	Converts the abundant, but inactive, zymogen plasminogen to plasmin by hydrolyzing a single Arg-Val bond in plasminogen. By controlling plasmin-mediated proteolysis, it plays an important role in tissue remodeling and degradation, in cell migration and many other physiopathological events. Plays a direct role in facilitating neuronal migration. [UniProt]
PTM	The single chain, almost fully active enzyme, can be further processed into a two-chain fully active form by a cleavage after Arg-310 catalyzed by plasmin, tissue kallikrein or factor Xa. Differential cell-specific N-linked glycosylation gives rise to two glycoforms, type I (glycosylated at Asn-219) and type II (not glycosylated at Asn-219). The single chain type I glycoform is less readily converted into the two-chain form by plasmin, and the two-chain type I glycoform has a lower activity than the two-chain type II glycoform in the presence of fibrin. N-glycosylation of Asn-152; the bound oligomannosidic glycan is involved in the interaction with the mannose receptor. Characterization of O-linked glycan was studied in Bowes melanoma cell line. [UniProt]
Cellular Localization	Secreted, extracellular space. [UniProt]

Images



ARG83216 Human tPA ELISA Kit (Rapid One-Step) standard curve image

ARG83216 Human tPA ELISA Kit (Rapid One-Step) results of a typical standard run with optical density reading at 450 nm.