

tPA (h2): 293T Lysate: sc-170486

BACKGROUND

uPA (urokinase-type plasminogen activator) and tPA (tissue plasminogen activator), which are serine proteases and members of the trypsin family, are essential to the intrinsic coagulation system. tPA is primarily involved in fibrinolysis, whereas uPA principally mediates cell migration and tissue remodeling processes. uPA and tPA are responsible for cleaving plasminogen, a large serum β -globulin that is deposited on the Fibrin strands within a thrombus. uPA and tPA preferentially target plasminogen at the Arg-Val bond to produce plasmin (also designated Fibrinolysin), which is a trypsin-like enzyme that acts on Arg-Lys bonds in Fibrin and Fibrinogen and contributes to the systematic activation of the coagulation cascade. uPA and tPA each consist of two chains that are designated A and B. The A chain of uPA can be cleaved, resulting in low and high molecular mass forms. uPA and tPA are regulated by the serpin family members PAI-1 and PAI-2, which are serine proteinase inhibitors that complex with uPA, tPA and other targeted proteinases and then slowly disassociate to produce cleaved species that fold into stable inactive conformations.

REFERENCES

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5. Cheng, X.F., et al. 1992. Binding of tissue plasminogen activator to human endothelial cells. Importance of the B-chain as a ligand. *Biochem. J.* 287: 407-413.
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7. Schaefer, B.M., et al. 1995. Differential expression of urokinase-type plasminogen activator (uPA), its receptor (uPA-R), and inhibitor type-2 (PAI-2) during differentiation of keratinocytes in an organotypic coculture system. *Cell Res.* 220: 415-423.

CHROMOSOMAL LOCATION

Genetic locus: PLAT (human) mapping to 8p11.21.

PRODUCT

tPA (h2): 293T Lysate represents a lysate of human tPA transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

APPLICATIONS

tPA (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive tPA antibodies. Recommended use: 10-20 μ l per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.