

Polyclonal Antibody to t-PA / PLAT - Purified

Alternate names:	Alteplase, Reteplase, Tissue-type plasminogen activator, tPA
Catalog No.:	AP00958PU-N
Quantity:	0.2 mg
Background:	TPA converts the abundant, but inactive, zymogen plasminogen to plasmin by hydrolyzing a single Arg-Val bond. By controlling plasmin-mediated proteolysis, it plays an important role in tissue remodeling and degradation, cell migration and many other physiopathological events. TPA binds to fibrin with high affinity; this leads to an increase in the catalytic efficiency of the enzyme of 100- to 1000-fold, due to an increase in affinity for plasminogen. Similarly, binding to heparin increases the activation of plasminogen. Binding to laminin and fibronectin has also been demonstrated. TPA also binds to mannose receptor and the low density lipoprotein receptor related protein (LRP1). These proteins are involved in TPA clearance. TPA binds to annexin II and to cytokeratin 8. As yet unidentified interactions on endothelial cells and vascular smooth muscle cells (VSMC) lead to a 100-fold stimulation of plasminogen activation. Binding to VSMC reduces TPA inhibition by PAI-1 by 30-fold.
Host:	Sheep
Immunogen:	Recombinant rabbit tPA
Format:	State: Liquid purified Ig Purification: Protein G chromatography Buffer System: 0.05M Sodium phosphate, pH 6.6 containing 0.1M Sodium chloride and 1mM EDTA
Applications:	ELISA: 1:100,000. Western blot: 1 - 5 µg/ml. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	This antibody recognizes single and two-chain Rabbit tPA, both alone and in complex under reducing and native conditions.
Storage:	Store the antibody at -70°C. Avoid repeated freezing and thawing. Shelf life: one year from despatch.

Pictures:

Sheep anti Rabbit tPA (3 μ g/ml) -
 Secondary: Goat anti Sheep IgG, Alk.
 Phos. (1:3,000) - LANE1: 3 μ g tPA
 (reduced) - LANE2: 3 μ g tPA + 12 μ g CPAI
 (reduced) - LANE3: 3 μ g tPA (non-
 reduced) - LANE4: 3 μ g tPA + 12 μ g CPAI
 (non-reduced) - LANE5: Molecular weight
 standards

Western blot

