tPA Rabbit pAb

CatalogNo: YT4707

Key Features

Host Species
- Rabbit

Reactivity
- Human,Mouse,Rat

Applications
- WB,ELISA

MW
- 63kD (Observed)

Isotype
- IgG

Recommended Dilution Ratios

WB 1:500-1:2000
ELISA 1:10000
Not yet tested in other applications.

Storage

Storage*	-15°C to -25°C/1 year(Do not lower than -25°C)
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Basic Information

Clonality	Polyclonal

Immunogen Information

Immunogen	The antiserum was produced against synthesized peptide derived from human tPA. AA range:38-87
Specificity	tPA Polyclonal Antibody detects endogenous levels of tPA protein.

Target Information

Gene name PLAT

Protein Name Tissue-type plasminogen activator

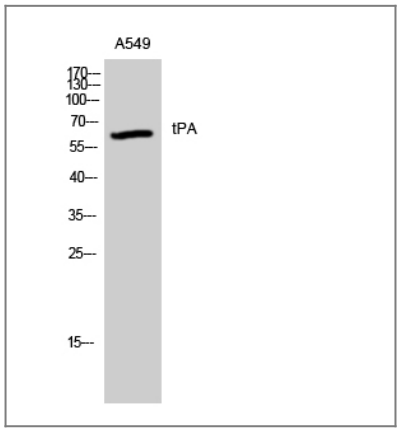
Organism	Gene ID	UniProt ID
Human	5327;	P00750;
Mouse	18791;	P11214;
Rat	25692;	P19637;

Cellular Localization Secreted, extracellular space.

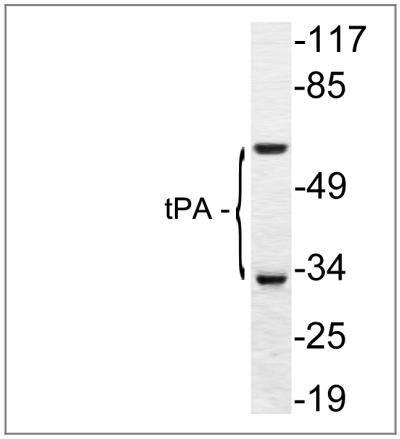
Tissue specificity Synthesized in numerous tissues (including tumors) and secreted into most extracellular body fluids, such as plasma, uterine fluid, saliva, gingival crevicular fluid, tears, seminal fluid, and milk.

Function Catalytic activity:Specific cleavage of Arg-|-Val bond in plasminogen to form plasmin.,Disease:Increased activity of TPA is the cause of hyperfibrinolysis [MIM:173370]. Hyperfibrinolysis leads to excessive bleeding. Defective release of TPA causes hypofibrinolysis, leading to thrombosis or embolism.,Domain:Both FN1 and EGF-like domains are important for binding to LRP1.,Domain:Both FN1 and one of the kringle domains are required for binding to fibrin.,Domain:The FN1 domain mediates binding to annexin A2.,Domain:The second kringle domain is implicated in binding to cytokeratin-8 and to the endothelial cell surface binding site.,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. Play a direct role in facilitating neuronal migration.,online information:Clinical information on Activase,online information:Clinical information on Retavase,online information:The Singapore human mutation and polymorphism database,online information:Tissue plasminogen activator entry,pharmaceutical:Available under the names Activase (Genentech) and Retavase (Centocor and Roche) [Retavase is a fragment of TPA that contains kringle 2 and the protease domain; it was also known as BM 06.022]. Used in Acute Myocardial Infarction (AMI), in Acute Ischemic Stroke (AIS) and Pulmonary Embolism (PE) to initiate fibrinolysis.,PTM:Characterization of O-linked glycan was studied in Bowes melanoma cell line.,PTM: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.,PTM:N-glycosylation of Asn-152; the bound oligomannosidic glycan is involved in the interaction with the mannose receptor.,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.,similarity:Belongs to the peptidase S1 family.,similarity:Contains 1 EGF-like domain.,similarity:Contains 1 fibronectin type-I domain.,similarity:Contains 1 peptidase S1 domain.,similarity:Contains 2 kringle domains.,subunit:Heterodimer of chain A and chain B held by a disulfide bond. Binds to fibrin with high affinity. This interaction leads to an increase in the catalytic efficiency of the enzyme between 100-fold and 1000-fold, due to an increase in affinity for plasminogen. Similarly, binding to heparin increases the activation of plasminogen. Binds to annexin A2, cytokeratin-8, fibronectin and laminin. Binds to mannose receptor and the low-density lipoprotein receptor-related protein (LRP1); these proteins are involved in TPA clearance. Yet unidentified interactions on endothelial cells and vascular smooth muscle cells (VSMC) lead to a 100-fold stimulation of plasminogen activation. In addition, binding to VSMC reduces TPA inhibition by PAI-1 by 30-fold. Binds LRP1B; binding is followed by internalization and degradation.,tissue specificity:Synthesized in numerous tissues (including tumors) and secreted into most extracellular body fluids, such as plasma, uterine fluid, saliva, gingival crevicular fluid, tears, seminal fluid, and milk.,

Validation Data



Western Blot analysis of A549 cells using tPA Polyclonal Antibody. Secondary antibody(catalog#:RS0002) was diluted at 1:20000



Western blot analysis of lysate from A549 cells, using tPA antibody.

Contact information

Orders:	order@immunoway.com
Support:	tech@immunoway.com
Telephone:	877-594-3616 (Toll Free), 408-747-0185
Website:	http://www.immunoway.com
Address:	2200 Ringwood Ave San Jose, CA 95131 USA

Please scan the QR code to access additional product information:
tPA Rabbit pAb

For Research Use Only. Not for Use in Diagnostic Procedures.