



## Product Datasheet

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| <b>Product Name</b> | Tissue Plasminogen Activator Human Recombinant  |
| <b>Cata No</b>      | CB500443  |
| <b>Source</b>       | Chinese Hamster Ovary Cells (CHO)   |
| <b>Synonyms</b>     | Tissue-type plasminogen activator, EC 3.4.21.68, tPA, t-PA, t-plasminogen activator, TPA, T-PA, DKFZp686I03148. |

### Description

Tissue plasminogen activator (abbreviated PLAT or tPA) is a secreted serine protease which converts the proenzyme plasminogen to plasmin, a fibrinolytic enzyme. Plasminogen is synthesized as a single chain which is cleaved by PLAT into the two chain disulfide linked plasmin.

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.

Tissue Plasminogen Activator Human Recombinant produced in CHO cells is a single, glycosylated polypeptide chain containing 527 amino acids and having a molecular mass of 59008.71 Dalton. tPA is a serine protease enzyme that converts plasminogen to plasmin.

The tPA is purified by proprietary chromatographic techniques.

### Physical Appearance

Sterile Filtered White lyophilized (freeze-dried) powder.

### Purity

Greater than 98.0% as determined by:

- (a) Analysis by RP-HPLC.
- (b) Analysis by SDS-PAGE

### Formulation

Each mg of t-PA contains 1.7 gr L-arginine, 0.5 gr phosphoric acid and 4 mg tween 80.

### Stability

Lyophilized t-PA although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution tPA should be stored at 4°C between 2-7 days and for future use below -18°C.

For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

**Please prevent freeze-thaw cycles.**

**\* For Non-Clinical Research Use Only \***