

32-2858: tPA Recombinant Protein

Alternative Name : Tissue-type plasminogen activator, EC 3.4.21.68, tPA, t-PA, t-plasminogen activator, TPA, T-PA, DKFZp686l03148.

Description

Source : Chinese Hamster Ovary Cells (CHO) Physical Appearance Sterile Filtered White lyophilized (freeze-dried) powder. 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. 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.

Product Info

Amount : 100 µg
Purification : Greater than 98.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.
Content : Each mg of t-PA contains 1.7 gr L-arginine, 0.5 gr phosphoric acid and 4 mg tween 80.
Storage condition : 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.

Application Note

It is recommended to reconstitute the lyophilized t-PA in sterile 18MΩ-cm H₂O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.