Creative Enzymes®

Tissue plasminogen activator from Human, Recombinant

Cat. No. NATE-0920

Lot. No. (See product label)

Introduction

Description	Tissue plasminogen activator (abbreviated PLAT or tPA) is a secreted serine proteasewhich converts the proenzymeplasminogento plasmin, a fibrinolyticenzyme. 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 migrationand tissue remodeling. Increased enzymatic activity causes hyperfibrinolysis, which manifests as excessive bleeding; decreased activity leads to hypofibrinolysiswhich can result in thrombosisor embolism.
Synonyms	Tissue-type plasminogen activator; EC 3.4.21.68; tPA; t-PA; t-plasminogen activator; TPA; T-PA

Product Information

Species	Human
Source	CHO
Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
EC Number	EC 3.4.21.68
Molecular Weight	59008.71 Da
Purity	Greater than 98.0% as determined by (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.
Activity	580,000 IU/mg
Buffer	Each mg of t-PA contains 1.7 gr L-arginine, 0.5 gr phosphoric acid and 4 mg tween 80.

Storage and Shipping Information

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.