

**Recombinant Human Tissue-Type Plasminogen Activator/PLAT Protein(C-6His)**

**Cat.NO.: TP05745**

3th Edition

**Synonyms:**T-PA; TPA; t-plasminogen activator; Tissue plasminogen activator;

**Description:**Tissue-type plasminogen activator (PLAT) is a protein that secreted into extracellular space. PLAT contains five domains: EGF-like domain, fibronectin type-I domain, 2 kringle domains and peptidase S1 domain. It belongs to the peptidase S1 family. The main function of this protein is to convert plasminogen into biologically active plasmin. As a protease, PLAT plays a crucial role in regulating blood fibrinolysis, maintaining the homeostasis of extracellular matrix and in modulating the post-translational activation of growth factors. PLAT is found not only in the blood, where its primary function is as a thrombolytic enzyme, but also in the central nervous system (CNS). It participates in a number of physiological and pathological events in the CNS, as well as the role of neuroserpin as the natural regulator of PLAT's activity in these processes. Increased or decreased activity of PLAT leads to hyperfibrinolysis or hypofibrinolysis, respectively. In addition, as a cytokine, PLAT plays a pivotal role in the pathogenesis of renal interstitial fibrosis through diverse mechanisms. Thus, as a fibrogenic cytokine, it promotes the progression of kidney diseases.

**Form:**PBS

**Molecular Weight:**61.7 kDa

**Sequences:**Ser36-Pro562

**Purity:**> 95% by HPLC

**Concentration:**

**Endotoxin Level:**<1.0 EU per 1 ug of protein (determined by LAL method)

**Storage:**Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.