# Human tPA Protein

**Cat. No.** TPA-HM10A

## Description

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| **Source** | Recombinant Human tPA Protein is expressed from HEK293 with His tag at the C-terminus. |
| | It contains Ser36-Pro562, which consists of two chains: chain A (Ser36-Arg310) and chain B (Ile311-Pro562). |
| **Accession** | P00750-1 |
| **Molecular Weight** | The protein has a predicted MW of 60.13 kDa. The protein is activated by thermolysin and cleaved to a 2-chain protease, it migrates to 40-45 kDa (Chain A) and 35-40 kDa (Chain B) based on Bis-Tris PAGE result. |
| **Endotoxin** | Less than 1EU per μg by the LAL method. |
| **Purity** | > 95% as determined by Bis-Tris PAGE |

## Formulation and Storage

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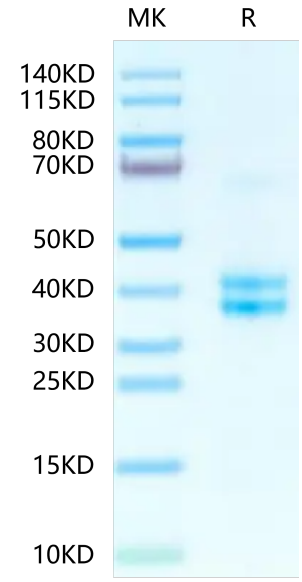
| **Formulation** | Lyophilized from 0.22μm filtered solution in 20mM MES, 300mM Nacl, 200mM Arginine (pH 5.5). Normally 8% trehalose is added as protectant before lyophilization. |
| **Reconstitution** | Centrifuge the tube before opening. Reconstituting to a concentration more than 100 μg/ml is recommended. Dissolve the lyophilized protein in 20mM MES, 300mM Nacl, 200mM Arginine (pH 5.5). |
| **Storage** | -20 to -80°C for 12 months as supplied from date of receipt.-80°C for 3-6 months after reconstitution.2-8°C for 2-7 days after reconstitution.Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles. |

## Background

Tissue plasminogen activator (tPA) is the predominant plasminogen activator present in the vascular and nervous systems.t tPA is not only neuroprotective for postnatal primary cortical neurons, but also that the predominant route for enhancing cell survival is via an mTORdependent mechanism.

## Assay Data

**Bis-Tris PAGE**




Human tPA on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

**Bioactivity Data**

Measured by its ability to cleave a peptide substrate, N-carbobenzyloxy-Gly-Gly-Arg-7-amido-4-methylcoumarin (Z-GGR-AMC). The specific activity is > 200 pmol/min/μg.