# Mouse glu-Plasminogen

*Cat. No. CZY-016*

*Lot. No.* (See product label)

## Introduction

***Description*** Plasminogen is a single chain glycoprotein zymogen which is synthesized in the liver and circulates in plasma at a concentration of approximately 2.4 μM. The plasminogen molecule contains 790 amino acids, 24 disulfide bridges, no free sulfhydryls and 5 regions of internal sequence homology, known as kringles, between Lys77 and Arg560. These five triple-looped, three disulfide bridged, kringle regions are homologous to the kringle domains in t-PA, u-PA and prothrombin. Plasminogen contains one high affinity (Kd=9x10-6M) and four low affinity (Kd=5x10-3M) lysine binding sites. The high affinity binding site resides within the first kringle region of plasminogen. The interaction of plasminogen with fibrin and α2-antiplasmin is mediated by these lysine binding sites. Native glu-plasminogen (Mr=88,000) is readily converted to Lys-77-plasminogen (Mr=83,000) by plasmin hydrolysis of the Lys76-Lys77 peptide bond. Elastase catalyzed cleavage of the Val441-Val442 peptide bond of glu-plasminogen yields a functionally active zymogen termed Val-442 plasminogen or mini-plasminogen. The conversion of plasminogen to plasmin occurs by a variety of mechanisms, but all result in hydrolysis of the Arg560-Val561 peptide bond of plasminogen, yielding two chains which remain covalently associated by a disulfide bond. Native glu-plasminogen is prepared from fresh frozen human plasma by a modification of the procedure of Castellino, utilizing gel filtration and affinity chromatography. The two carbohydrate variants of glu-plasminogen (CHOI and CHOII) are isolated by gradient elution from lysine-Sepharose using the lysine analog, e-aminocaproic acid. The plasminogen is supplied in 50% (vol/vol) glycerol/H2O for storage at -20°C. Purity is determined by SDS-PAGE analysis.

## Product Information

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|---|---|
| ***Source*** | Mouse |
| ***Formulation*** | 50% glycerol/water (v/v) |
| ***Molecular Weight*** | 88000 |
| ***Purity*** | >95% by SDS-PAGE |
| ***Isoelectric point*** | 6.2 |
| ***Structure*** | single chain, 24 intra chain disulfide bridges, 5 kringle regions. |
| ***Localization*** | Plasma |
| ***Extinction coefficient*** | 17 |
| ***Percent carbohydrate*** | Approximately 2% |

## Usage and Packaging

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|---|---|
| ***Package*** | 100 μg |

## Storage and Shipping Information

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|---|---|
| ***Storage*** | -20°C |
| ***Stability*** | 12 months |

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| ***Stability*** | 12 months |