

Active Native Bovine glu-Plasminogen

Cat. No. PLG-268B **Lot. No.** (See product label)

SPECIFICATION

Product Overview

Species Bovine

Source Plasma

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 μ M. 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 ($K_d=9 \times 10^{-6}$ M) and four low affinity ($K_d=5 \times 10^{-3}$ M) lysine binding sites. The high affinity binding site resides within the first kringle region of plasminogen. The interaction of plasminogen with fibrin and α_2 -antiplasmin is mediated by these lysine binding sites. Native glu-plasminogen ($M_r=88,000$) is readily converted to Lys-77-plasminogen ($M_r=83,000$) 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.

Form 50% (vol/vol) glycerol/H₂O

Bio-activity < 10="" ppm="" plasmin="" activity="" for="">

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Purity	>95% by SDS-PAGE. NOT tissue/cell culture grade. Not tested for endotoxin.
Characteristic	Extinction coefficient: 17.0, Isoelectric point:6.2, Percent carbohydrate: Approximately 2%, Structure:single chain, 24 intra chain disulfide bridges, 5 kringle regions
Storage	-20°C

GENE INFORMATION

Gene Name	PLG plasminogen [Bos taurus]
Official Symbol	PLG
Synonyms	LPA; plasminogen; plasmin; lipoprotein, Lp(a)
Gene ID	280897
mRNA Refseq	NM_173951
Protein Refseq	NP_776376
UniProt ID	P06868
Chromosome Location	chromosome: 9
Pathway	Activation of Matrix Metalloproteinases, organism-specific biosystem; Complement and coagulation cascades, organism-specific biosystem; Extracellular matrix organization, organism-specific biosystem
Function	protein binding; serine-type endopeptidase activity

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA