Active Native Mouse Plasmin

Cat. No. Plg-297M **Lot. No.** (See product label)

SPECIFICATION

Product Overview	
Species	Mouse
Source	Plasma
Description	Plasminogen (whether Glu-1, Lys-77 or Val-442) is converted to the active serine protease plasmin by hydrolysis of the Arg560-Val561 peptide bond yielding an NH2-terminal heavy (A) chain and a COOH-terminal light (B) chain linked by 2 disulfide bonds. This conversion is catalyzed by a variety of physiological and pathological activators, including urinary type plasminogen activators, tissue type plasminogen activators, streptokinase, staphylokinase, kallikrein, factors IXa and XIIa. The COOH-terminal derived light chain (Mr=26,000) contains the catalytic triad (His42, Asp85 and Ser180) as well as the streptokinase binding site. The NH2-terminal derived heavy chain ranges in molecular weight from 63,000 to 12,000 depending on the type of plasminogen from which it originated. In the absence of inhibitors, plasmin cleaves the amino-terminal Glu1 to Lys76 peptide from plasmin (plasminogen) to yield Lys-plasmin, which has a greater affinity for fibrin than the Glu form. The heavy chain of Lys-plasminogen contains 5 triple loop disulfide bridged regions of internal sequence homology known as kringles. Kringles 1-4 contain the ω-aminocarboxylic acid and fibrin binding sites.
Form	50% Glycerol/Water (v/v)
Bio-activity	Chromogenic assay

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:6.7-8.3, Percent carbohydrate:Approximately 2%, Structure:Two subunits, Mr=57,000 and Mr=26,000, disulfide linked, 5 kringle domains 22 disulfide bridges, NH2-terminal lysine
Storage	-20°C

GENE INFORMATION

Gene Name	Plg plasminogen [Mus musculus]
Official Symbol	Plg
Synonyms	Pg; AI649309; plasminogen; angiostatin; plasmin heavy chain A; plasmin light chain B
Gene ID	18815
mRNA Refseq	NM_008877
Protein Refseq	NP_032903
UniProt ID	P20918
Chromosome Location	17 A1; 17 8.5 cM
Pathway	Activation of Matrix Metalloproteinases, organism-specific biosystem; Blood Clotting Cascade, organism-specific biosystem; Complement and coagulation cascades, organism-specific biosystem
Function	apolipoprotein binding; endopeptidase activity; protein domain specific binding

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