

Product datasheet for TP762039

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

Plasminogen (PLG) (NM_000301) Human Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Purified recombinant protein of Human plasminogen (PLG), transcript variant 1,Ala301-

Val586, with N-terminal His tag, expressed in E. coli, 50ug

Species: Human Expression Host: E. coli

Expression cDNA Clone

or AA Sequence:

A DNA sequence encoding the region(Ala301-Val586) of PLG

Tag: N-His

Predicted MW: 31.7 kDa

Concentration: $>0.05 \mu g/\mu L$ as determined by microplate BCA method

Purity: > 80% as determined by SDS-PAGE and Coomassie blue staining

Buffer: 25 mM Tris-HCl, pH 8.0, 150 mM NaCl, 1% sarkosyl, 10% glycerol

Note: For testing in cell culture applications, please filter before use. Note that you may experience

some loss of protein during the filtration process.

Storage: Store at -80°C.

Stability: Stable for 12 months from the date of receipt of the product under proper storage and

handling conditions. Avoid repeated freeze-thaw cycles.

RefSeq: NP 000292

 Locus ID:
 5340

 UniProt ID:
 P00747

 RefSeq Size:
 3538

 Cytogenetics:
 6q26

 RefSeq ORF:
 2430

 Synonyms:
 HAE4





Summary:

The plasminogen protein encoded by this gene is a serine protease that circulates in blood plasma as an inactive zymogen and is converted to the active protease, plasmin, by several plasminogen activators such as tissue plasminogen activator (tPA), urokinase plasminogen activator (uPA), kallikrein, and factor XII (Hageman factor). The conversion of plasminogen to plasmin involves the cleavage of the peptide bond between Arg-561 and Val-562. Plasmin cleavage also releases the angiostatin protein which inhibits angiogenesis. Plasmin degrades many blood plasma proteins, including fibrin-containing blood clots. As a serine protease, plasmin cleaves many products in addition to fibrin such as fibronectin, thrombospondin, laminin, and von Willebrand factor. Plasmin is inactivated by proteins such as alpha-2macroglobulin and alpha-2-antiplasmin in addition to inhibitors of the various plasminogen activators. Plasminogen also interacts with plasminogen receptors which results in the retention of plasmin on cell surfaces and in plasmin-induced cell signaling. The localization of plasminogen on cell surfaces plays a role in the degradation of extracellular matrices, cell migration, inflamation, wound healing, oncogenesis, metastasis, myogenesis, muscle regeneration, neurite outgrowth, and fibrinolysis. This protein may also play a role in acute respiratory distress syndrome (ARDS) which, in part, is caused by enhanced clot formation and the suppression of fibrinolysis. Compared to other mammals, the cluster of plasminogenlike genes to which this gene belongs has been rearranged in catarrhine primates. [provided by RefSeq, May 2020]

Protein Families: Druggable Genome, Protease, Secreted Protein

Protein Pathways: Complement and coagulation cascades, Neuroactive ligand-receptor interaction

Product images:

