abcam

Product datasheet

Native human Plasminogen protein (Active) ab92924

2 References 1 Image

Description

Product name	Native human Plasminogen protein (Active)
Biological activity	No plasmin activity detected with the chromogenic substrate S-2251. >98% conversion to plasmin is observed upon activation with uPA.
Purity	> 95 % SDS-PAGE.
Expression system	Native
Accession	P00747
Protein length	Full length protein
Animal free	No
Nature	Native
Species	Human
Sequence	EPLDDYVNTQ GASLFSVTKK QLGAGSIEEC AAKCEEDEEF TCRAFQYHSK EQQCVIMAEN RKSSIIIRMR DVVLFEKKVY LSECKTGNGK NYRGTMSKTK NGITCQKWSS TSPHRPRFSP ATHPSEGLEE NYCRNPDNDP QGPWCYTTDP EKRYDYCDIL ECEEECMHCS GENYDGKISK TMSGLECQAW DSQSPHAHGY IPSKFPNKNL KKNYCRNPDR ELRPWCFTTD PNKRWELCDI PRCTTPPPSS GPTYQCLKGT GENYRGNVAV TVSGHTCQHW SAQTPHTHNR TPENFPCKNL DENYCRNPDG KRAPWCHTTN SQVRWEYCKI PSCDSSPVST EQLAPTAPPE LTPVVQDCYH GDGQSYRGTS STTTTGKKCQ SWSSMTPHRH QKTPENYPNA GLTMNYCRNP DADKGPWCFT TDPSVRWEYC NLKKCSGTEA SVVAPPPVVL LPDVETPSEE DCMFGNGKGY RGKRATTVTG TPCQDWAAQE PHRHSIFTPE TNPRAGLEKN YCRNPDGDVG GPWCYTTNPR KLYDYCDVPQ CAAPSFDCGK PQVEPKKCPG RVVGGCVAHP HSWPWQVSLR TRFGMHFCGG TLISPEWVLT AAHCLEKSPR PSSYKVILGA HQEVNLEPHV QEIEVSRLFL EPTRKDIALL KLSSPAVITD KVIPACLPSP NYVVADRTEC FITGWGETQG

TFGAGLLKEA QLPVIENKVC NRYEFLNGRV QSTELCAGHL AGGTDSCQGD SGGPLVCFEK DKYILQGVTS WGLGCARPNK PGVYVRVSRF VTWIEGVMRN N

Predicted molecular weight	92 kDa
Amino acids	20 to 810
Additional sequence information	(Gene ID: 5340) Full length mature protein, without the signal peptide.

Specifications

Our **Abpromise guarantee** covers the use of **ab92924** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	SDS-PAGE
Form	Liquid
Additional notes	ab92924 is purified from Human plasma that is tested and found negative for all communicable diseases, including HIV1, HIV2, Hepatitis Surface antigen and HCV. Solubility: > 2 mg/mL Extinction coefficient: $Epsilon^{0.1\%}$= 1.69 Prepared from fresh human plasma by immobilized lysine chromatography. Ultraviolet: Absorbance (280nm) = 16.56

Preparation and Storage

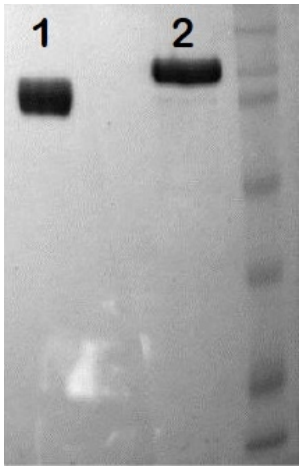
Stability and Storage	Shipped on dry ice. Upon delivery aliquot and store at -80ºC. Avoid freeze / thaw cycles. pH: 7.40 Constituents: 2.38% HEPES, 0.58% Sodium chloride This product is an active protein and may elicit a biological response in vivo, handle with caution.

General Info

Function	Plasmin dissolves the fibrin of blood clots and acts as a proteolytic factor in a variety of other processes including embryonic development, tissue remodeling, tumor invasion, and inflammation. In ovulation, weakens the walls of the Graafian follicle. It activates the urokinase-type plasminogen activator, collagenases and several complement zymogens, such as C1 and C5. Cleavage of fibronectin and laminin leads to cell detachment and apoptosis. Also cleaves fibrin, thrombospondin and von Willebrand factor. Its role in tissue remodeling and tumor invasion may be modulated by CSPG4. Binds to cells. Angiostatin is an angiogenesis inhibitor that blocks neovascularization and growth of experimental primary and metastatic tumors in vivo.
Tissue specificity	Present in plasma and many other extracellular fluids. It is synthesized in the liver.
Involvement in disease	Defects in PLG are a cause of susceptibility to thrombosis (THR) [MIM:188050]. It is a multifactorial disorder of hemostasis characterized by abnormal platelet aggregation in response to various agents and recurrent thrombi formation. Defects in PLG are the cause of plasminogen deficiency (PLGD) [MIM:217090]. PLGD is characterized by decreased serum plasminogen activity. Two forms of the disorder are

	distinguished: type 1 deficiency is additionally characterized by decreased plasminogen antigen levels and clinical symptoms, whereas type 2 deficiency, also known as dysplasminogenemia, is characterized by normal, or slightly reduced antigen levels, and absence of clinical manifestations. Plasminogen deficiency type 1 results in markedly impaired extracellular fibrinolysis and chronic mucosal pseudomembranous lesions due to subepithelial fibrin deposition and inflammation. The most common clinical manifestation of type 1 deficiency is ligneous conjunctivitis in which pseudomembranes formation on the palpebral surfaces of the eye progresses to white, yellow-white, or red thick masses with a wood-like consistency that replace the normal mucosa.
Sequence similarities	Belongs to the peptidase S1 family. Plasminogen subfamily. Contains 5 kringle domains. Contains 1 PAN domain. Contains 1 peptidase S1 domain.
Domain	Kringle domains mediate interaction with CSPG4.
Post-translational modifications	N-linked glycan contains N-acetyllactosamine and sialic acid. O-linked glycans consist of Gal-GalNAc disaccharide modified with up to 2 sialic acid residues (microheterogeneity). In the presence of the inhibitor, the activation involves only cleavage after Arg-580, yielding two chains held together by two disulfide bonds. In the absence of the inhibitor, the activation involves additionally the removal of the activation peptide.
Cellular localization	Secreted. Locates to the cell surface where it is proteolytically cleaved to produce the active plasmin. Interaction with HRG tethers it to the cell surface.

Images



SDS-PAGE - Native human Plasminogen protein (ab92924)

10% Tris-Hcl SDS-PAGE.

Lane 1: 5 ug, non-reduced ab92924.

Lane 2: 5 ug, reduced ab92924.

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