10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

PLG Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7313a

Product Information

Application	WB, E
Primary Accession	P00747
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB18475
Calculated MW	90569
Antigen Region	150-175

Additional Information

Gene ID	5340
Other Names	Plasminogen, Plasmin heavy chain A, Activation peptide, Angiostatin, Plasmin heavy chain A, short form, Plasmin light chain B, PLG
Target/Specificity	This PLG antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 150-175 amino acids from the N-terminal region of human PLG.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	PLG Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	PLG
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, C4 and C5 (PubMed:6447255). 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.
Cellular Location	Secreted. Note=Locates to the cell surface where it is proteolytically cleaved to produce the active plasmin. Interaction with HRG tethers it to the cell surface
Tissue Location	Present in plasma and many other extracellular fluids. It is synthesized in the liver

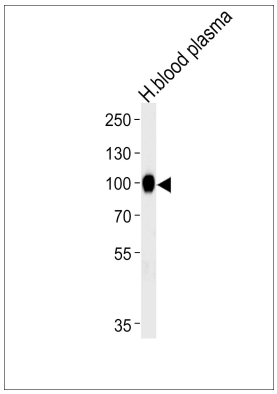
Background

PLG is a circulating zymogen that is converted to the active enzyme plasmin by cleavage of the peptide bond between arg560 and val561, which is mediated by urokinase and tissue plasminogen activator. The main function of this protein is to dissolve fibrin clots. The protein, like trypsin, belongs to the family of serine proteinases.

References

Hofmann,S.C., Voith,U. J. Invest. Dermatol. 129 (7), 1730-1739 (2009)
Passero,C.J., Mueller,G.M. J. Biol. Chem. 283 (52), 36586-36591 (2008)
Ohyama,S., Harada,T. Eur. J. Biochem. 271 (4), 809-820 (2004)
Lee,H., Kim,H.K. Arch. Biochem. Biophys. 375 (2), 359-363 (2000)

Images



Western blot analysis of lysate from human blood plasma tissue lysate, using PLG Antibody (N-term)(Cat. #AP7313a). AP7313a was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35ug per lane.