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PLG Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7313B

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	P00747
Reactivity	Human
Predicted	Canine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB18479
Calculated MW	90569
Antigen Region	636-665

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 636-665 amino acids from the C-terminal region of human PLG.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 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 (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	PLG (HGNC:9071)
Function	[Plasmin]: Protease which primary function is to degrade fibrin, the main component of blood clots (PubMed:6094526, PubMed:6919539). Also cleaves

	other components of blood clots like thrombospondin-1/THBS1 and von Willebrand factor (VWF) (PubMed:24449821, PubMed:7679575). Can also directly and/or through the activation of other proteases degrade the various components of the extracellular matrix including collagen, fibronectin and laminin (PubMed:14699093, PubMed:28849762, PubMed:9171346). Thereby, regulates a variety of biological processes including embryonic development, tissue remodeling, and inflammation (PubMed:9171346). In ovulation, weakens the walls of the Graafian follicle (By similarity). In vitro, it is also able to cleave several complement zymogens, such as C1, C4 and C5 (PubMed:6447255).
Cellular Location	[Plasmin]: Secreted. Note=Locates to the cell surface where it is proteolytically cleaved to produce the active plasmin (PubMed:14699093). Interaction with HRG tethers it to the cell surface (PubMed:15613921, PubMed:19712047, PubMed:9102401)
Tissue Location	Present in plasma and many other extracellular fluids. It is synthesized in the liver

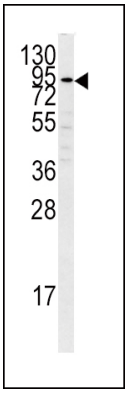
Background

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

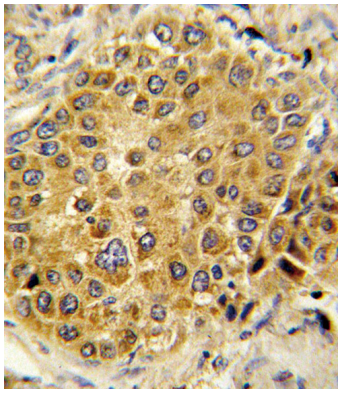
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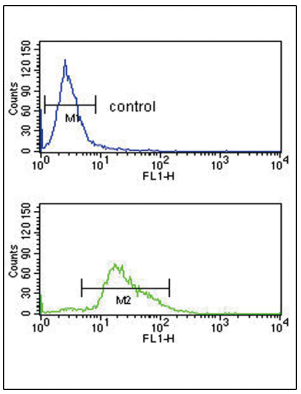
Images



Western blot analysis of PLG antibody (C-term) (Cat.#AP7313b) in K562 cell line lysates (35ug/lane). PLG (arrow) was detected using the purified Pab.

Formalin-fixed and paraffin-embedded human hepatocarcinoma reacted with PLG Antibody (C-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.





PLG Antibody (C-term) (Cat. #AP7313b) flow cytometry analysis of K562 cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

Citations

- Tranexamic Acid Improves Memory and Learning Abilities in Aging Mice
- Tranexamic Acid Ameliorates Non-melanoma Skin Cancer Induced by Long-term Ultraviolet A Irradiation.

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