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TPA Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6778C

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	P00750
Reactivity	Human, Rat, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB18787
Calculated MW	62917
Antigen Region	371-399

Additional Information

Gene ID	5327
Other Names	Tissue-type plasminogen activator, t-PA, t-plasminogen activator, tPA, Alteplase, Reteplase, Tissue-type plasminogen activator chain A, Tissue-type plasminogen activator chain B, PLAT
Target/Specificity	This TPA antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 371-399 amino acids from the Central region of human TPA.
Dilution	WB~~1:2000 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	TPA Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	PLAT (HGNC:9051)
Function	Converts the abundant, but inactive, zymogen plasminogen to plasmin by hydrolyzing a single Arg-Val bond in plasminogen. By controlling

plasmin-mediated proteolysis, it plays an important role in tissue remodeling and degradation, in cell migration and many other physiopathological events. During oocyte activation, plays a role in cortical granule reaction in the zona reaction, which contributes to the block to polyspermy (By similarity).

Cellular Location Secreted, extracellular space.

Tissue Location Synthesized in numerous tissues (including tumors) and secreted into most extracellular body fluids, such as plasma, uterine fluid, saliva, gingival crevicular fluid, tears, seminal fluid, and milk

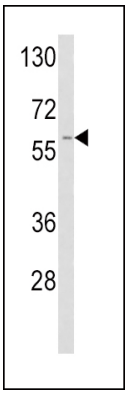
Background

TPA is a tissue-type plasminogen activator, a secreted serine protease which converts the proenzyme plasminogen to plasmin, a fibrinolytic enzyme. Tissue-type plasminogen activator is synthesized as a single chain which is cleaved by plasmin to a two chain disulfide linked protein. This enzyme plays a role in cell migration and tissue remodeling. Increased enzymatic activity causes hyperfibrinolysis, which manifests as excessive bleeding; decreased activity leads to hypofibrinolysis which can result in thrombosis or embolism.

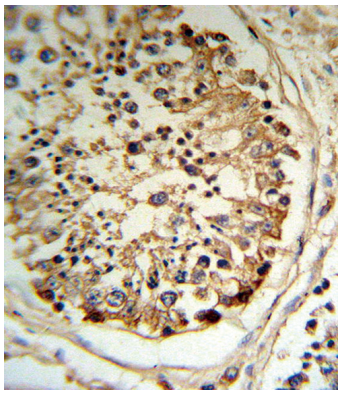
References

de Vos,A.M., et.al., Biochemistry 31 (1), 270-279 (1992)
Bentov,Y., et.al., PLoS ONE 4 (6), E5918 (2009)

Images

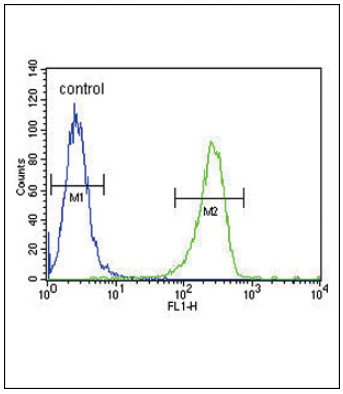


Western blot analysis of TPA Antibody (Center) (Cat. #AP6778c) in A2058 cell line lysates (35ug/lane). TPA (arrow) was detected using the purified Pab.



TPA Antibody (Center) (RB18787) IHC analysis in formalin fixed and paraffin embedded human testis tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the TPA Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.

TPA Antibody (Center)? (Cat. #AP6778c) flow cytometric analysis of A2058 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.