

Basic Information

Product Name	Anti-tPA/PLAT Antibody	
Gene Name	PLAT	
Source	Rabbit	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, IHC, IHC-F, ICC, FCM	
Contents	500 ug/ml antibody with PBS , 0.02% NaN ₃ , 1 mg BSA and 50% glycerol.	
Immunogen	A synthetic peptide corresponding to a sequence of human PLAT(QKDVPGVYTKVTNYLDWIRDNM RP).	
concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	63-69KD	
Dilution Ratios	Western blot(WB): 1:500-2000 Immunohistochemistry in paraffin section (IHC): 1:50-400 Immunohistochemistry in frozen section: 1:50-400 Immunocytochemistry in fixed cells: 1:50-400 Flow cytometry (FCM): 1-3 µg/1x10 ⁶ cells (Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

Background Information

PLAT is also known as tPA. This gene encodes 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. Alternative splicing of this gene results in multiple transcript variants encoding different isoforms.

Selected Validation Data

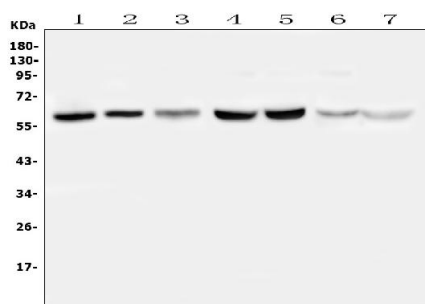


Figure 1. Western blot analysis of PLAT using anti-PLAT antibody (A02965-1). Lane 1: human Hela whole cell lysates, Lane 2: human U2OS whole cell lysates, Lane 3: human U-87MG whole cell lysates, Lane 4: rat liver tissue lysates, Lane 5: rat kidney tissue lysates, Lane 6: mouse liver tissue lysates, Lane 7: mouse kidney tissue lysates. anti-PLAT antigen affinity purified polyclonal antibody (Catalog # A02965-1) probed with a goat anti-rabbit IgG-HRP secondary antibody. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002). A specific band was detected for PLAT at approximately 63-69 kDa. The expected band size for PLAT is at 63 kDa.

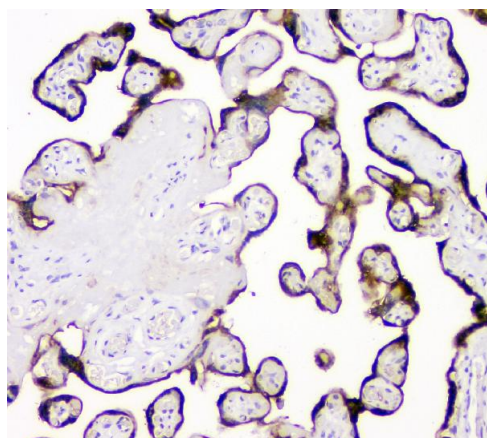


Figure 2. IHC analysis of PLAT using anti-PLAT antibody (A02965-1). PLAT was detected in paraffin-embedded section of human placenta tissue. anti-PLAT Antibody (A02965-1). Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.

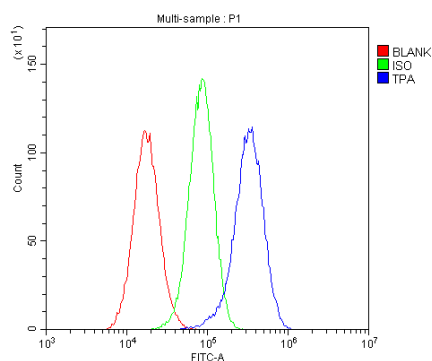


Figure 3. Flow Cytometry analysis of U251 cells using anti-PLAT antibody (A02965-1). Overlay histogram showing U251 cells stained with A02965-1 (Blue line). anti-PLAT Antibody (A02965-1, 1 µg/1x10⁶ cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10 µg/1x10⁶ cells) was used as secondary antibody. Isotype control antibody (Green line) was rabbit IgG (1 µg/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.