ARG40849
anti-tPA antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes tPA
Tested Reactivity	Hu, Ms, Rat
Tested Application	FACS, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	tPA
Species	Human
Immunogen	Synthetic peptide corresponding to a sequence of Human tPA. (QKDVPGVYTKVTNYLDWIRDNMRP)
Conjugation	Un-conjugated
Alternate Names	TPA; tPA; T-PA; t-plasminogen activator; t-PA; Tissue-type plasminogen activator; EC 3.4.21.68; Reteplase; Alteplase

Application Instructions

Application table

Application	Dilution
FACS	1 - 3 µg/10^6 cells
IHC-P	1:200 - 1:1000
WB	1:500 - 1:2000

Application Note

IHC-P: Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0, epitope retrieval solution) for 20 min.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

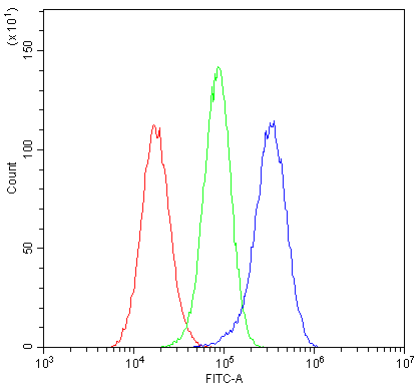
Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	0.2% Na2HPO4, 0.9% NaCl, 0.05% Sodium azide and 4% Trehalose.
Preservative	0.05% Sodium azide
Stabilizer	4% Trehalose
Concentration	0.5 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed

	before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

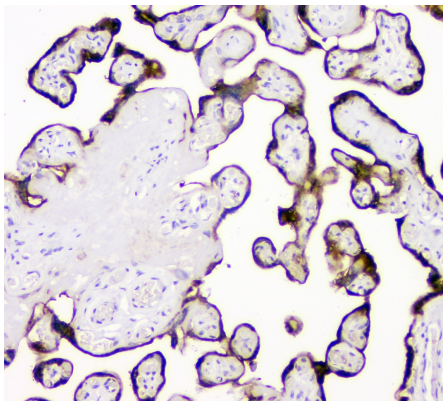
Gene Symbol	PLAT
Gene Full Name	plasminogen activator, tissue
Background	This gene encodes tissue-type plasminogen activator, a secreted serine protease which converts the proenzyme plasminogen to plasmin, a fibrinolytic enzyme. Tissue-type plasminogen activator is synthesized as a single chain which 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. [provided by RefSeq, Jul 2008]
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. Plays a direct role in facilitating neuronal migration. [UniProt]
Calculated Mw	63 kDa
PTM	The single chain, almost fully active enzyme, can be further processed into a two-chain fully active form by a cleavage after Arg-310 catalyzed by plasmin, tissue kallikrein or factor Xa. Differential cell-specific N-linked glycosylation gives rise to two glycoforms, type I (glycosylated at Asn-219) and type II (not glycosylated at Asn-219). The single chain type I glycoform is less readily converted into the two-chain form by plasmin, and the two-chain type I glycoform has a lower activity than the two-chain type II glycoform in the presence of fibrin. N-glycosylation of Asn-152; the bound oligomannosidic glycan is involved in the interaction with the mannose receptor. Characterization of O-linked glycan was studied in Bowes melanoma cell line. [UniProt]
Cellular Localization	Secreted, extracellular space. [UniProt]

Images



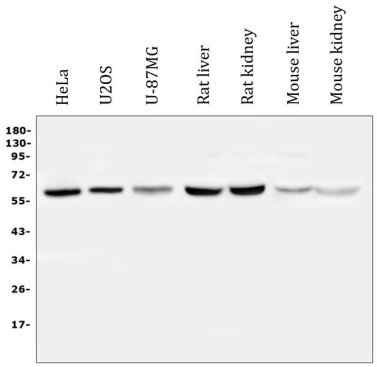
ARG40849 anti-tPA antibody FACS image

Flow Cytometry: U251 cells were blocked with 10% normal goat serum and stained with ARG40849 anti-tPA antibody (blue) at 1 µg/10^6 cells for 30 min at 20°C, followed by incubation with DyLight®488 labelled secondary antibody. Isotype control antibody (green) was Rabbit IgG (1 µg/10^6 cells) used under the same conditions. Unlabelled sample (red) was also used as a control.



ARG40849 anti-tPA antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human placenta tissue. Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0, epitope retrieval solution) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG40849 anti-tPA antibody at 1 µg/ml, overnight at 4°C.



ARG40849 anti-tPA antibody WB image

Western blot: 50 µg of samples under reducing conditions. HeLa, U2OS, U-87MG, Rat liver, Rat kidney, Mouse liver and Mouse kidney lysates stained with ARG40849 anti-tPA antibody at 0.5 µg/ml, overnight at 4°C.