

Datasheet for 600-401-B22**Plasminogen Activator Inhibitor 2 Antibody****Overview**

Description:	Anti-Plasminogen Activator Inhibitor 2 (RABBIT) Antibody - 600-401-B22
Item No.:	600-401-B22
Size:	100 µg
Applications:	ELISA, IHC, WB
Reactivity:	Human
Host Species:	Rabbit

Product Details

Background:	Extracellular plasminogen activator inhibitor type-2 (also known as PAI-2, Placental plasminogen activator inhibitor; Monocyte Arg-serpin; Urokinase inhibitor; SERPINB2 serpin peptidase inhibitor, clade B (ovalbumin), member 2) is a coagulation factor and a potent inhibitor of urokinase-type plasminogen activator (u-PA) and also acts as a multifunctional protein. It is present in most cells, especially monocytes and macrophages. PAI-2 exists in two forms, a 60-kDa, secreted, extracellular, glycosylated form and a 43-kDa intracellular form. It is a multifunctional protein that plays a role in cell differentiation, in prevention of programmed cell death, in the regulation of cell proliferation, in the inhibition of microbial proteinases and in the protection against stromal degradation. High levels of the PAI-2 protein are associated with a good prognosis in breast cancer, small cell lung, ovarian cancer, and inhibition of metastasis. PAI-2 also plays a role in inflammation on the surface of the eye. PAI-2 may cooperate with pRb2/p130 in modulating PAI-2 gene expression by chromatin remodeling.
Synonyms:	rabbit anti-PAI-2 antibody, rabbit anti-plasminogen activator inhibitor 2 antibody, Placental plasminogen activator inhibitor, Monocyte Arg-serpin, Urokinase inhibitor, SERPINB2, Serpin B2, serpin peptidase inhibitor, PAI2, PLANH2
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	SERPINB2
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Reactivity:	Human
Immunogen Type:	Conjugated Peptide
Immunogen:	This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a peptide corresponding to an internal area of human PAI-2 protein.
Purity/Specificity:	This affinity-purified antibody is directed against human PAI-2 protein. The product was affinity purified from monospecific antiserum by immunoaffinity purification. Reactivity occurs against human PAI-2 protein. A BLAST analysis was used to suggest cross reactivity with PAI-2 proteins from several primates based on 94% homology with the immunizing sequence. Reactivity against homologues from other sources is not known.
Relevant Links:	• UniProtKB - P05120 • NCBI - 4505595 • GeneID - 5055

Application Details

Tested Applications:	ELISA, IHC, WB
Application Note:	This affinity purified antibody has been tested for use in ELISA, Immunochemistry, and western blot. Specific conditions for reactivity should be optimized by the end user. Expect a band 42-46.6 kDa in size corresponding to PAI-2 protein by western blotting in the appropriate cell lysate or extract.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:100,000 – 150,000
IHC:	10µg/ml
WB:	1:500 – 1:2,000

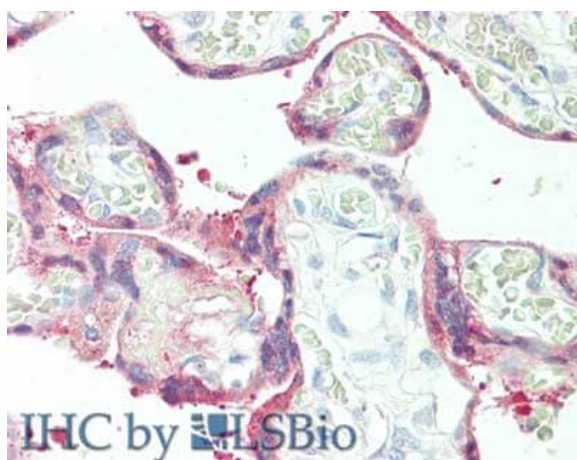
Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1.2 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

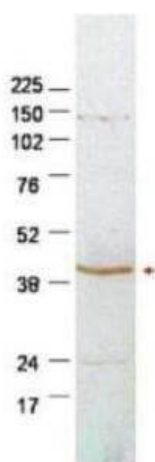
Shipping Condition:	Dry Ice
Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



Immunohistochemistry

Immunohistochemistry of rabbit anti-Plasminogen Activator 2 antibody. Tissue: heart. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: Anti-Plasminogen Activator 2 at 10 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Staining: Plasminogen Activator II as precipitated red signal with hematoxylin purple nuclear counterstain.



Western Blot

Western blot using Rockland's affinity purified anti-PAI-2 antibody shows detection of endogenous PAI-2 in 50µg of HeLa whole cell lysates (p/n W09-000-364). The band at ~42kDa (arrowhead) corresponds to PAI-2. Faint non-specific bands are also noted at lower and higher molecular weights positions. Primary antibody was used at a 1:500 dilution in 5% BLOTTO (p/n B501-0500) in PBS reacted overnight at 4°C. The membrane was washed and reacted with a 1:5,000 dilution of HRP-conjugated Gt-a-Rabbit IgG (p/n 611-103-122) for 45 min at room temperature with ECL used for detection. Molecular weight estimation was made by comparison to prestained MW markers. Personal communication, Luca D'Agostino, Temple University, Philadelphia, PA.

Disclaimer

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