Datasheet for ABIN968717

anti-PAI1 antibody (AA 207-329)

1 Image | 3 Publications

Go to Product page

Overview

Quantity:	50 µg
Target:	PAI1 (SERPINE1)
Binding Specificity:	AA 207-329
Reactivity:	Human, Mouse, Rat, Dog, Chicken
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This PAI1 antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (IF)

Product Details

Immunogen:	Human PAI-1 aa. 207-329
Clone:	41-PAI
Isotype:	IgG1
Cross-Reactivity:	Dog (Canine), Rat (Rattus), Mouse (Murine), Chicken
Characteristics:	1. Since applications vary, each investigator should titrate the reagent to obtain optimal results. 2. Please refer to us for technical protocols. 3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing. 4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
Purification:	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity

Product Details

	chromatography.

Target Details

Target:	PAI1 (SERPINE1)
Alternative Name:	PAI-1 (SERPINE1 Products)
Background:	Fibrinolysis is regulated by the plasminogen activators, tissue plasminogen activator (tPA) and urokinase PA (uPA), and by the plasminogen activator-inhibitors (PAIs). Two PAIs include the serpin family members, PAI-1 and PAI-2. PAI-1 is a glycoprotein found in plasma, platelets, endothelial cells, hepatoma cells, and fibrosarcoma cells. Thrombin, endotoxin, and IL-1 induce PAI-1 synthesis in endothelial cells, which is where the major portion of plasma PAI-1 is produced. PAI-2 is a glycoprotein expressed in placenta and monocyte macrophages. The uPA/plasmin system may play a key role in cancer progression through degradation of the extracellular matrix during tumor cell migration. Paradoxically, high levels of PAI-1 are also predictive of poor prognosis of cancer patients. This finding may be a result of the role of plasmin proteolysis in the prevention of tumor vessel assembly. PAI-1 can promote tumor angiogenesis, and the mechanism may involve PAI-induced regulation of plasmin proteolysis during tumor angiogenesis. Thus, PAI-1 is a serpin protease inhibitor that is important for the regulation of plasmin proteolysis during fibrinolysis and extracellular matrix degradation.
Molecular Weight:	47 kDa
Pathways:	p53 Signaling, Cellular Response to Molecule of Bacterial Origin, Carbohydrate Homeostasis, Autophagy, Smooth Muscle Cell Migration

Application Details

Comment:	Related Products: ABIN968536, ABIN967389
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	250 µg/mL
Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09 % sodium azide.
Preservative:	Sodium azide

Handling

Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	Store undiluted at -20°C.

Publications

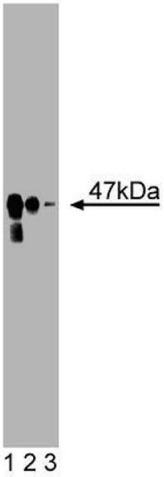
Product cited in:

Cai, Li, Goette, Mera, Honeycutt, Feterik, Wilcox, Dudley, Harrison, Langberg: "Downregulation of endocardial nitric oxide synthase expression and nitric oxide production in atrial fibrillation: potential mechanisms for atrial thrombosis and stroke." in: **Circulation**, Vol. 106, Issue 22, pp. 2854-8, (2002) (PubMed).

Bajou, Masson, Gerard, Schmitt, Albert, Praus, Lund, Frandsen, Brunner, Dano, Fusenig, Weidle, Carmeliet, Loskutoff, Collen, Carmeliet, Foidart, Noël: "The plasminogen activator inhibitor PAI-1 controls in vivo tumor vascularization by interaction with proteases, not vitronectin. Implications for antiangiogenic strategies." in: **The Journal of cell biology**, Vol. 152, Issue 4, pp. 777-84, (2001) (PubMed).

Ginsburg, Zeheb, Yang, Rafferty, Andreasen, Nielsen, Dano, Lebo, Gelehrter: "cDNA cloning of human plasminogen activator-inhibitor from endothelial cells." in: **The Journal of clinical investigation**, Vol. 78, Issue 6, pp. 1673-80, (1986) (PubMed).

Images



Western Blotting

Image 1. Western blot analysis of PAI-1 on human endothelial cell lysate. Lane 1: 1:2500, lane 2: 1:5000, lane 3: 1:10000 of anti-PAI-1 antibody.