

PAI-3 (H-62): sc-99153

BACKGROUND

PAI-1, PAI-2 and PAI-3 (plasminogen activator inhibitor-1, -2 and -3) are members of the serpin serine proteinase inhibitor family. PAI-1 and PAI-2 regulate uPA (urokinase-type plasminogen activator) and TPA (tissue plasminogen activator), resulting in the inhibition of proteolytic activity. Members of the serpin family generally complex with their target proteinases, then disassociate slowly into cleaved species that fold into stable inactive forms. PAI-1 can fold into the inactive state without cleavage resulting in the latent form of PAI-1. Activity can be restored to the latent form of PAI-1 through denaturation and renaturation. PAI-2 occurs in secreted and cytosolic forms through facultative polypeptide translocation. PAI-3 inhibits plasminogen activators as well as activated protein C. PAI-3 is secreted in plasma, but is also expressed in liver.

REFERENCES

1. Riccio, A., et al. 1985. The human urokinase-plasminogen activator gene and its promoter. *Nucleic Acids Res.* 13: 2759-2771.
2. Belin, D., et al. 1989. Facultative polypeptide translocation allows a single mRNA to encode the secreted and cytosolic forms of PLI2. *EMBO J.* 8: 3287-3294.
3. Schmitt, M., et al. 1991. Human tumor cell urokinase-type plasminogen activator (uPA): degradation of the proenzyme form (pro-uPA) by granulocyte elastase prevents subsequent activation by plasmin. *Adv. Exp. Med. Biol.* 297: 111-128.
4. Mottonen, J., et al. 1992. Structural basis of latency in PAI-1. *Nature* 355: 270-273.
5. Niedbala, M.J. 1993. Cytokine regulation of endothelial cell extracellular proteolysis. *Agents Actions Suppl.* 42: 179-193.
6. Schaefer, B.M., et al. 1995. Differential expression of urokinase-type plasminogen activator (uPA), its receptor (uPA-R), and inhibitor type-2 (PAI-2) during differentiation of keratinocytes in an organotypic coculture system. *Exp. Cell Res.* 220: 415-423.

CHROMOSOMAL LOCATION

Genetic locus: SERPINA5 (human) mapping to 14q32.13; Serpina5 (mouse) mapping to 12 E.

SOURCE

PAI-3 (H-62) is a rabbit polyclonal antibody raised against amino acids 111-172 mapping within an internal region of PAI-3 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

PAI-3 (H-62) is recommended for detection of PAI-3 of human and, to a lesser extent, mouse origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

PAI-3 (H-62) is also recommended for detection of PAI-3 in additional species, including bovine.

Suitable for use as control antibody for PAI-3 siRNA (h): sc-45416, PAI-3 siRNA (m): sc-45417, PAI-3 shRNA Plasmid (h): sc-45416-SH, PAI-3 shRNA Plasmid (m): sc-45417-SH, PAI-3 shRNA (h) Lentiviral Particles: sc-45416-V and PAI-3 shRNA (m) Lentiviral Particles: sc-45417-V.

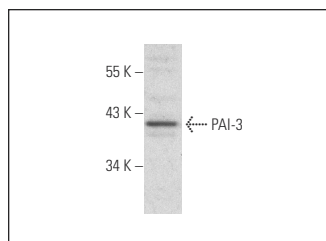
Molecular Weight of PAI-3: 46 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



PAI-3 (H-62): sc-99153. Western blot analysis of PAI-3 expression in WEHI-231 whole cell lysate.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.