SANTA CRUZ BIOTECHNOLOGY, INC.

PAI-3 (P-15): sc-34496



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

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- Belin, D., Wohlwend, A., Schleuning, W.D., Kruithof, E.K. and Vassalli, J.D. 1989. Facultative polypeptide translocation allows a single mRNA to encode the secreted and cytosolic forms of PLI2. EMBO J. 8: 3287-3294.
- Schmitt, M., Kanayama, N., Janicke, F., Hafter, R. and Graeff, H. 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.
- Mottonen, J., Strand, A., Symersky, J., Sweet, R.M., Danley, D.E., Geoghegan, K.F., Gerard, R.D. and Goldsmith, E.J. 1992. Structural basis of latency in PAI-1. Nature 355: 270-273.
- Niedbala, M.J. 1993. Cytokine regulation of endothelial cell extracellular proteolysis. Agents Actions Suppl. 42: 179-193.
- Schaefer, B.M., Stark, J.H., Fusenig, N.E., Todd, R.F. III and Kramer, M.D. 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.
- SWISS-PROT/TrEMBL (P05154). World Wide Web URL: http://www.expasy. ch/sprot/sprot-top.html

CHROMOSOMAL LOCATION

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

SOURCE

PAI-3 (P-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of PAI-3 of human origin.

STORAGE

Store at 4° C, **D0 NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PRODUCT

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

Blocking peptide available for competition studies, sc-34496 P, (100 μg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PAI-3 (P-15) is recommended for detection of PAI-3 of human and, to a lesser extent, mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

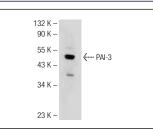
PAI-3 (P-15) is also recommended for detection of PAI-3 in additional species, including bovine.

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.

DATA



PAI-3 (P-15): sc-34496. Western blot analysis of PAI-3 expression in K-562 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.