

# Anti-Human PAI-1 (Sheep) Whole IgG, 10 mg



Ref#: SAPAI-IG  
Lot#: xxxxxx  
Exp. Date: xxxx-xx

For Research Use Only  
Not for Use in Diagnostic Procedures  
For *in-vitro* Use Only

|                       |  |
|-----------------------|--|
| <b>Immunogen:</b>     | Recombinant Plasminogen Activator Inhibitor-1 (PAI-1) from bacterial extracts  |
| <b>Format:</b>        | Whole IgG from antisera in 10 mM HEPES, pH 7.2, 150 mM NaCl, 50% (v/v) glycerol  |
| <b>Host:</b>          | Sheep  |
| <b>Storage:</b>       | Store between -10 and -20°C. Vial should be tightly capped. Do not store in frost-free freezers. Allow product to warm to room temperature and gently mix before use |
| <b>Total Protein:</b> | 10 mg  |
| <b>Volume:</b>        | 1 vial containing 1.00 mL anti-human, whole IgG  |
| <b>Concentration:</b> | 10 mg/mL whole IgG by Absorbance; Extinction Coefficient $E^{1\%}_{280} = 13.4$  |
| <b>Specificity:</b>   | Specificity demonstrated by immunoelectrophoresis and ELISA methods  |
| <b>Application:</b>   | Suitable as a source of antibodies   |

Type 1 plasminogen activator inhibitor (PAI-1) is synthesized by various cell types including endothelial cells, hepatocytes, vascular smooth muscle cells, mesothelial cells, granulosa cells, fibroblasts and malignant cells and is also found in the  $\alpha$ -granules of platelets as well as plasma. It circulates in plasma at a very low concentration of ~20 ng/mL. The plasma concentration can be affected by diurnal variations, age, sex, pregnancy, obesity and exercise status.

PAI-1 exists in at least three different conformations, including an active form with a half-life of about 1-3 hours, a latent form and a proteolytically or oxidatively inactivated form. Vitronectin has been shown to bind active PAI-1 and stabilize it in its active form, extending its functional half-life to greater than 24 hours. Little specific binding of the latent or inactive forms of PAI-1 to vitronectin occurs.

PAI-1 is considered to be the primary regulator of plasminogen activation in-vivo. It is the major inhibitor of both the single and two-chain forms of tissue plasminogen activator (tPA), being able to inhibit the single-chain form at least 10,000 times greater than other PAI forms.