

Anti-Human Plasminogen (Sheep)

Whole IgG, 5 mg



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

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

Immunogen:	Human Plasminogen (from human plasma)
Format:	Whole IgG from antisera in 10 mM HEPES, pH 7.2, 150 mM NaCl, 50% (v/v) glycerol
Host:	Sheep
Storage:	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
Total Protein:	5 mg
Volume:	1 vial containing 1.00 mL anti-human, whole IgG
Concentration:	5 mg/mL whole IgG by Absorbance; Extinction Coefficient $E^{1\%}_{280} = 13.4$
Specificity:	Specificity demonstrated by immunoelectrophoresis and ELISA methods
Application:	Suitable as a source of antibodies

Plasminogen is synthesized in the liver and circulates in plasma at a concentration of ~200 µg/ml (~2.3 µM). It is a single-chain glycoprotein of ~88 kDa that consists of a catalytic domain followed by five kringle structures. Within these kringle structures are four low-affinity lysine binding sites and one high affinity lysine binding site. It is through these lysine binding sites that plasminogen binds to fibrin and to α2-antiplasmin. Native plasminogen (glu-plasminogen) exists in two variants that differ in their extent of glycosylation, and each variant has up to six isoelectric forms with respect to sialic acid content, for a total of 12 molecular forms. Activation of glu-plasminogen by the plasminogen activators urokinase (UPA), or tissue plasminogen activator (tPA) occurs by cleavage after residue Arg560 to produce the two-chain active serine protease plasmin. In a positive feedback reaction, the plasmin generated cleaves an ~8 kDa peptide from glu-plasminogen, producing lys 77-plasminogen which has a higher affinity for fibrin and when bound is a preferred substrate for plasminogen activators such as urokinase. Additional activators of plasminogen include kallikrein and activated factor XII. The primary inhibitor of plasmin in plasma is α2-antiplasmin