

Anti-Human Plasminogen (Sheep)

Affinity-Purified IgG, 0.50 mg



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

Store at -10 to -20°C

For Research Use Only
 Not for Use in Diagnostic Procedures
 For *in vitro* use only

Immunogen:	Human Plasminogen (from human plasma)		
Format:	Affinity Purified IgG in 10 mM HEPES, pH 7.4, 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:	0.50 mg		
Applications:	Suitable as a source of enriched antibodies For Research Use Only. Not for Use in Diagnostic Procedures. For <i>in vitro</i> use only		
Volume:	1 vial containing 0.250 mL anti-human, affinity purified IgG		
Concentration:	2 mg/mL affinity purified IgG by Absorbance; Extinction Coefficient $E^{1\%}_{280} = 13.4$		
Specificity:	Specificity demonstrated by immunoelectrophoresis and ELISA methods		
Neutralizing Activity:	Not Determined		
Species Cross Reactivity:	Dog: ++	Human: ++	Mouse: ++
	Pig: ++	Rabbit: ++	Rat: ++

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.