

**Goat Anti-Plasminogen (Pg)
Affinity-Purified IgG
0.5 mg**

Catalogue: GAPG-AP
Lot: SAMPLE
Expiry date: **/****
Store at -10 to -20°C.

For Research Use Only.
Not for use in diagnostic procedures.

Description of Plasminogen (Pg)

Plasminogen (Pg) is synthesized in the liver and circulates in plasma at a concentration of PC in plasma is ~200 µg/mL (~2.3 uM). Plasminogen 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 α_2 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 lys⁷⁷-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 α_2 antiplasmin. Other physiological inhibitors of plasmin include α_2 -macroglobulin and antithrombin¹⁻³.

References and Reviews

1. Bachmann F; The Plasminogen-Plasmin Enzyme System; in Hemostasis and Thrombosis, 3rd Edition, eds. RW Coleman, J Hirsh, VJ Marder and EW Salzman, pp 1592-1622, J.B. Lippincott Co., Philadelphia PA, USA, 1994.
2. Castellino FJ, Powell JR; Human Plasminogen; Methods in Enzymology 80, pp 365-378, 1981.
3. Wiman B, Collen D; Molecular Mechanism of Physiological Fibrinolysis; Nature 272, pp 548-553, 1978.

Product Specifications

Description:

Vial containing 0.250 mL of whole IgG purified by affinity-chromatography on immobilized Pg. Total protein is 0.5 mg.

Format:

Affinity-purified IgG (APIgG), clear liquid.

Host Animal:

Goat

Immunogen:

Human Plasminogen purified from plasma.

Concentration:

APIgG concentration is 2.00 mg/ml, determined by absorbance using an extinction coefficient ($E_{280}^{1\%}$) of 13.4.

Buffer:

10 mM HEPES, 0.15 M NaCl, 50% (v/v) glycerol, pH 7.4.

Storage:

Store between -10 and -20 °C. Product will become viscous but will not freeze. Avoid storage in frost-free freezers. Keep vial tightly capped. Allow product to warm to room temperature and gently mix before use.

Specificity:

This product has been solid phase absorbed to remove contaminating antibodies prior to affinity purification. Immunoelectrophoresis against normal plasma gives a single precipitin line. No reaction was obtained with plasminogen deficient plasma.

Applications:

This product is suitable for use in immunoprecipitation techniques for the detection and measurement of plasminogen antigen.

Neutralizing activity:

Not determined.

Related Products

GAPG-IG	Goat anti-Human plasminogen, IgG from antiserum
GAPG-APHRP	Goat anti-human plasminogen, APIgG-peroxidase
SAPG-IG	Sheep anti-Human plasminogen, IgG from antiserum
SAPG-AP	Sheep anti-Human plasminogen, affinity-purified IgG
PG-EIA	Paired antibody set for ELISA of Pg, 5 x 96 tests
PG-DP	Human plasma deficient in Pg, immune depleted

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