



**Goat anti-human Plasminogen (Pg)
Peroxidase Conjugated Affinity-Purified
IgG
0.1 mg**

Catalogue: GAPG-APHRP
Lot No.: SAMPLE
Expiry date: **/****
Store between -10 °C and -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 ~200 µg/ml (~2.3 µM). 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 α2antiplasmin. 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 α2antiplasmin. Other physiological inhibitors of plasmin include α2macroglobulin and antithrombin¹⁻³.

References and Reviews

1. Bachmann F; The Plasminogen-Plasmin Enzyme System; in Hemostasis and Thrombosis, 3rd Edition, eds. RW Colman, 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 0.100 ml of affinity-purified IgG conjugated to horseradish peroxidase (HRP) through carbohydrate groups. Total protein is 0.1 mg.

Format:

APIgG-HRP conjugate as a clear, slightly red-brown liquid.

Host Animal:

Goat

Immunogen:

Human plasminogen purified from plasma.

Concentration:

APIgG-HRP concentration is 1.0 mg/ml, determined by absorbance using an extinction coefficient ($E_{280}^{1\%}$) of 14.

Buffer:

A buffered stabilizer solution containing 50% (v/v) glycerol.

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. Avoid exposure to sodium azide as this is an inhibitor of peroxidase activity.

Specificity:

Prior to conjugation, this antibody was specific for Pg as demonstrated by immunoelectrophoresis and ELISA.

Applications:

Suitable as a source of peroxidase-labelled antibodies to Pg.

Related Products

GAPG-IG Goat anti-human plasminogen, IgG from antiserum
GAPG-AP Goat anti-human plasminogen, affinity-purified IgG
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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