

****REPRESENTATIVE DATASHEET******Goat anti-human Plasminogen (Pg)**

Affinity-Purified IgG

0.5 mg

Product #: GAPG-AP-ASR**Lot #:** XXXX**Expiry date:** XXXX**DOM:** XXXX

Store at -10 to -20°C

1395 Sandhill Drive. Ancaster, Ontario, Canada L9G 4V5
905-304-9896 • 800-903-6020 • fax 905-304-9897**Analyte Specific Reagent.**

Analytical and performance characteristics are not established.

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 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 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 XXXX ml of 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 XXXX mg/ml, determined by absorbance using an extinction coefficient ($E^{1\%_{280}}$) of 13.4.**Buffer:**

10 mM HEPES, pH 7.4, 150 mM NaCl, 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.

Specificity:

This antibody is specific for plasminogen as demonstrated by immunoelectrophoresis and ELISA.

Precautions:

Unused solution should be disposed of according to current local, State and Federal Regulations. For a Material Safety Data Sheet for this product contact Affinity Biologicals Inc.

Visit our website (www.affinitybiologicals.com) for other related products.

Limited Warranty: This product is warranted to perform in accordance with its labeling and literature. Affinity Biologicals Inc. disclaims any implied warranty of merchantability or fitness for any other purposes, and in no event will Affinity Biologicals Inc. be liable for any consequential damages arising out of aforesaid express warranty.

Manufactured in Canada by:
AFFINITY BIOLOGICALS INC.
1395 Sandhill Drive
Ancaster ON CANADA L9G 4V5
Tel: (905) 304-9896
(800) 903-6020
Fax: (905) 304-9897
info@affinitybiologicals.com