

****REPRESENTATIVE DATASHEET****

Sheep anti-human Plasminogen (Pg)

Whole IgG from antiserum

5 mg

Product #: SAPG-IG

Lot #: XXXX

Expiry date: XXXX

Store at -10 to -20°C

 1348 Sandhill Drive, Ancaster, Ontario, Canada L9G 4V5
 905-304-9896 • 800-903-6020 • fax 905-304-9897

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 XXXX ml of whole IgG representing approximately 1 ml of antiserum. Total protein is 5 mg.

Format:

Whole IgG, clear liquid.

Host Animal:

Sheep

Immunogen:

Human plasminogen purified from plasma.

Concentration:

 IgG 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.

Applications:

Suitable as a source of antibodies to human plasminogen.

Neutralizing activity:

Not determined.

Species Cross Reactivity: (immunodiffusion vs. citrated plasma)

Human:	XXXX	Mouse:	XXXX	Rat:	XXXX
Rabbit:	XXXX	Pig:	XXXX	Dog:	XXXX

Related Products:

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

 Visit our site (www.affinitybiologicals.com) for details.

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.
 1348 Sandhill Drive
 Ancaster ON CANADA L9G 4V5
 Tel: (905) 304-9896
 (800) 903-6020
 Fax: (905) 304-9897
info@affinitybiologicals.com