

#12657 Store at -20C

Plasminogen Antibody



Orders: 877-616-CELL (2355)
orders@cellsignal.com

Support: 877-678-TECH (8324)

Web: info@cellsignal.com
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source:	UniProt ID:	Entrez-Gene Id:
WB	H	Endogenous	100	Rabbit	#P00747	5340

Product Usage Information	Application Western Blotting	Dilution 1:1000
Storage	Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at –20°C. Do not aliquot the antibody.	
Specificity / Sensitivity	Plasminogen Antibody recognizes endogenous levels of total plasminogen protein.	
Source / Purification	Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Pro132 of human plasminogen protein. Antibodies are purified by protein A and peptide affinity chromatography.	
Background	<p>Plasminogen is the inactive, proenzyme precursor to the serine protease plasmin that degrades fibrin within blood clots, promotes cell migration through proteolytic degradation of extracellular matrix proteins, and regulates angiogenesis and wound healing through activation of matrix metalloproteases (1-4). Inactive plasminogen is produced and secreted by liver cells and is found in the circulatory system and extracellular fluids (1). The plasminogen protein is composed of an amino terminal preactivation peptide followed by five kringle domains and a serine proteinase domain (5). The plasminogen zymogen binds to sites on the cell surface and is subsequently cleaved to release the active serine proteinase plasmin. Identified plasminogen cell surface receptors (including S100A10, enolase and PLGRKT) share carboxy-terminal lysine residues that interact with plasminogen kringle domains, resulting in cell surface localization of plasminogen (6-8). Cleavage of plasminogen can be catalyzed by a number of distinct enzymes, including tissue specific plasminogen activator (tPA), urokinase plasminogen activator (uPA), and kallikrein (1). An additional plasminogen cleavage product is the angiogenesis inhibitor angiostatin, which is derived from the first four kringle domains (9). A number of related angiogenesis inhibitors, derived from various parts of the plasminogen kringle region, have been shown to inhibit endothelial cell growth and proliferation (10). Mutations in the corresponding <i>PLG</i> gene have been linked to plasminogen deficiencies, characterized by decreased plasmin expression and ligneous conjunctivitis in some individuals (11).</p>	
Background References	<ol style="list-style-type: none"> 1. Plow, E.F. et al. (1995) <i>FASEB J</i> 9, 939-45. 2. Creemers, E. et al. (2000) <i>Am J Pathol</i> 156, 1865-73. 3. Gong, Y. et al. (2008) <i>J Clin Invest</i> 118, 3012-24. 4. Gong, Y. and Hoover-Plow, J. (2012) <i>J Biomed Biotechnol</i> 2012, 437920. 5. Petersen, T.E. et al. (1990) <i>J Biol Chem</i> 265, 6104-11. 6. Miles, L.A. et al. (2005) <i>Front Biosci</i> 10, 1754-62. 7. Lighvani, S. et al. (2011) <i>Blood</i> 118, 5622-30. 8. Ceruti, P. et al. (2013) <i>Exp Hematol Oncol</i> 2, 12. 9. O'Reilly, M.S. et al. (1994) <i>Cell</i> 79, 315-28. 10. Nguyen, T.M. et al. (2007) <i>Blood</i> 109, 4793-802. 11. Mehta, R. and Shapiro, A.D. (2008) <i>Haemophilia</i> 14, 1261-8. 	

Species Reactivity	Species reactivity is determined by testing in at least one approved application (e.g., western blot).
Western Blot Buffer	IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.
Applications Key	WB: Western Blotting
Cross-Reactivity Key	

H: human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster
X: Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse
GP: Guinea Pig **Rab:** rabbit **All:** all species expected

Trademarks and Patents

Cell Signaling Technology is a trademark of Cell Signaling Technology, Inc.

All other trademarks are the property of their respective owners. Visit cellsignal.com/trademarks for more information.

Limited Uses

Except as otherwise expressly agreed in a writing signed by a legally authorized representative of CST, the following terms apply to Products provided by CST, its affiliates or its distributors. Any Customer's terms and conditions that are in addition to, or different from, those contained herein, unless separately accepted in writing by a legally authorized representative of CST, are rejected and are of no force or effect.

Products are labeled with For Research Use Only or a similar labeling statement and have not been approved, cleared, or licensed by the FDA or other regulatory foreign or domestic entity, for any purpose. Customer shall not use any Product for any diagnostic or therapeutic purpose, or otherwise in any manner that conflicts with its labeling statement. Products sold or licensed by CST are provided for Customer as the end-user and solely for research and development uses. Any use of Product for diagnostic, prophylactic or therapeutic purposes, or any purchase of Product for resale (alone or as a component) or other commercial purpose, requires a separate license from CST. Customer shall (a) not sell, license, loan, donate or otherwise transfer or make available any Product to any third party, whether alone or in combination with other materials, or use the Products to manufacture any commercial products, (b) not copy, modify, reverse engineer, decompile, disassemble or otherwise attempt to discover the underlying structure or technology of the Products, or use the Products for the purpose of developing any products or services that would compete with CST products or services, (c) not alter or remove from the Products any trademarks, trade names, logos, patent or copyright notices or markings, (d) use the Products solely in accordance with CST Product Terms of Sale and any applicable documentation, and (e) comply with any license, terms of service or similar agreement with respect to any third party products or services used by Customer in connection with the Products.