

plasminogen (H-14): sc-15033

BACKGROUND

Cleavage of the serine proteinase plasminogen to form plasmin is the central event in the dissolution of blood clots by the fibrinolytic system. Within the fibrinolytic cascade, the serine proteinases urokinase-type plasminogen activator (uPA) and tissue-type plasminogen activator (tPA) activate the pro-enzyme plasminogen by cleaving plasminogen to form the fibrinolytically active enzyme plasmin. The enzyme plasmin consists of a heavy chain of 561 amino acids, which originates from the N-terminus of plasminogen, and a light chain of 230 amino acid residues, which is derived from the C-terminus of plasminogen. Plasmin is a proangiogenic proteinase that is capable of degrading a variety of extracellular matrix proteins and that facilitates endothelial cell migration and angiogenesis. In the presence of free sulfhydryl donors (FSD), plasmin undergoes auto-proteolysis and is converted to the enzyme angiotensin, which blocks angiogenesis and neovascularization and can inhibit the growth of primary and metastatic tumors.

REFERENCES

1. Forsgren, M., et al. 1987. Molecular cloning and characterization of a full length cDNA clone for human plasminogen. FEBS Lett. 213: 254-260.
2. Petersen, T.E., et al. 1990. Characterization of the gene for human plasminogen, a key proenzyme in the fibrinolytic system. J. Biol. Chem. 265: 6104-6111.

CHROMOSOMAL LOCATION

Genetic locus: PLG (human) mapping to 6q26.

SOURCE

plasminogen (H-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of plasminogen of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-15033 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

plasminogen (H-14) is recommended for detection of plasminogen, plasmin heavy chain A, and the short form of plasmin heavy chain A of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000). Suitable for use as control antibody for plasminogen siRNA (h): sc-40857, plasminogen shRNA Plasmid (h): sc-40857-SH and plasminogen shRNA (h) Lentiviral Particles: sc-40857-V.

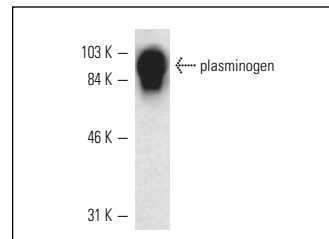
Molecular Weight of plasminogen: 90-100 kDa.

Positive Controls: human plasma extract: sc-364374 or human recombinant plasminogen.

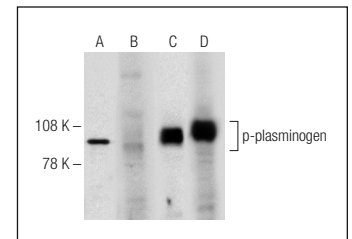
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



plasminogen (H-14): sc-15033. Western blot analysis of human recombinant plasminogen.



Western blot analysis of plasminogen phosphorylation in untreated (A,C) and lambda protein phosphatase (sc-200312A) treated (B,D) human platelet extracts. Antibodies tested include p-plasminogen (Ser 578)-R: sc-16310-R (A,B) and plasminogen (H-14): sc-15033 (C,D).

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.


 MONOS
Satisfaction
Guaranteed

Try **plasminogen (B-11): sc-376324** or **plasminogen (G-7): sc-376405**, our highly recommended monoclonal alternatives to plasminogen (H-14).