

ZPI (M-170): sc-67399

BACKGROUND

ZPI, also known as SERPINA10 (serpin peptidase inhibitor, clade A (α -1 anti-proteinase, antitrypsin), member 10) or PZI, is a 444 amino acid secreted protein that functions as a Protein Z-dependent protease inhibitor. Expressed by the liver, ZPI is secreted into the plasma where, in the presence of calcium, Protein Z and phospholipids, it inhibits the activated pro-coagulation factors X and XI (Factor X and Factor XI). This inhibition helps properly regulate intravenous blood clotting. ZPI, a member of the serpin protein family, contains five potential N-linked glycosylation sites and a tyrosine at position 387 which, when disrupted, renders ZPI inactive. Defects in the gene encoding ZPI may increase susceptibility to venous thrombosis, the formation of blood clots within a vein.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: SERPINA10 (human) mapping to 14q32.13; Serpina10 (mouse) mapping to 12 E.

SOURCE

ZPI (M-170) is a rabbit polyclonal antibody raised against amino acids 71-240 mapping within an internal region of ZPI of mouse origin.

RESEARCH USE

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

PRODUCT

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

APPLICATIONS

ZPI (M-170) is recommended for detection of ZPI of mouse, rat and, to a lesser extent, human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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 ZPI siRNA (h): sc-63257, ZPI siRNA (m): sc-63258, ZPI shRNA Plasmid (h): sc-63257-SH, ZPI shRNA Plasmid (m): sc-63258-SH, ZPI shRNA (h) Lentiviral Particles: sc-63257-V and ZPI shRNA (m) Lentiviral Particles: sc-63258-V.

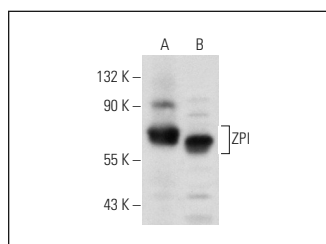
Molecular Weight of ZPI: 72 kDa.

Positive Controls: mouse liver extract: sc-2256.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



ZPI (M-170): sc-67399. Western blot analysis of ZPI expression in mouse liver tissue extract (A) and Hep G2 whole cell lysate (B).

STORAGE

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

PROTOCOLS

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