

ZPI (Y-17): sc-55456



The Power to Question

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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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.

CHROMOSOMAL LOCATION

Genetic locus: SERPINA10 (human) mapping to 14q32.13.

SOURCE

ZPI (Y-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ZPI 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-55456 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ZPI (Y-17) is recommended for detection of ZPI of human and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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.

Molecular Weight of ZPI: 72 kDa.

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) 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.

RESEARCH USE

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