# ZPI (P-20): sc-55454



The Power to Question

#### **BACKGROUND**

ZPI, also known as SERPINA10 (serpin peptidase inhibitor, clade A ( $\alpha$ -1 antiproteinase, 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, \*\*D0 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 (mouse) mapping to 12 E.

#### **SOURCE**

ZPI (P-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of ZPI of mouse origin.

#### **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-55454 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## **APPLICATIONS**

ZPI (P-20) is recommended for detection of ZPI of mouse origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ 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).

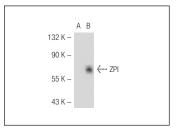
Suitable for use as control antibody for ZPI siRNA (m): sc-63258, ZPI shRNA Plasmid (m): sc-63258-SH and ZPI shRNA (m) Lentiviral Particles: sc-63258-V.

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) 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



ZPI (P-20): sc-55454. Western blot analysis of ZPI expression in non-transfected: sc-117752 (A) and mouse ZPI transfected: sc-124829 (B) 293T whole cell lysates

## **RESEARCH USE**

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