## SANTA CRUZ BIOTECHNOLOGY, INC.

# ZPI (H-137): sc-67400



### 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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## CHROMOSOMAL LOCATION

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

## SOURCE

ZPI (H-137) is a rabbit polyclonal antibody raised against amino acids 101-237 mapping within an internal region of ZPI of human origin.

#### PRODUCT

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

## **APPLICATIONS**

ZPI (H-137) is recommended for detection of ZPI of human and, to a lesser extent, rat 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 ZPI siRNA (h): sc-63257, ZPI shRNA Plasmid (h): sc-63257-SH and ZPI shRNA (h) Lentiviral Particles: sc-63257-V.

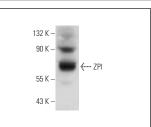
Molecular Weight of ZPI: 72 kDa.

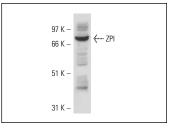
Positive Controls: Hep G2 cell lysate: sc-2227.

#### **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<sup>™</sup> compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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<sup>™</sup> Mounting Medium: sc-24941.

## DATA





ZPI (H-137): sc-67400. Western blot analysis of ZPI expression in Hep G2 whole cell lysate.

ZPI (H-137): sc-67400. Western blot analysis of ZPI expression in rat liver tissue extract.

#### **STORAGE**

Store at 4° C, \*\*D0 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.