# TFPI-2 (A-20): sc-18720



The Power to Question

## **BACKGROUND**

The extrinsic pathway of blood coagulation is initiated by contact of plasma factor VII with tissue factor, a cellular membrane glycoprotein that normally is segregated from the bloodstream but can be exposed after tissue injury or newly synthesized in endothelial cells or leukocytes after stimulation by endotoxin and cytokines. Inhibition of factor VIIa/tissue factor activity requires a plasma component (tissue factor pathway inhibitor (TFPI)), lipoprotein-associated coagulation inhibitor (LACI) or extrinsic pathway inhibitor (EPI), and factor Xa. TFPI directly inhibits factor Xa, and, in an Xa-dependent fashion, also inhibits the factor VIIa-tissue factor catalytic complex. TFPI is a multivalent, Kunitz-type proteinase inhibitor that circulates in association with plasma lipoproteins VLDL, LDL and HDL. TFPI-2 (also known as placental protein 5) is a related glycoprotein of 27 kDa that was originally isolated from human placenta. The genes which encode for TFPI and TFPI-2 map to human chromosomes 2q31-q32.1 and 7q22, respectively.

# REFERENCES

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# CHROMOSOMAL LOCATION

Genetic locus: TFPI2 (human) mapping to 7q22; Tfpi2 (mouse) mapping to 6 A2.

# SOURCE

TFPI-2 (A-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of TFPI-2 of mouse origin.

# **RESEARCH USE**

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

#### **PRODUCT**

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

Blocking peptide available for competition studies, sc-18720 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## **APPLICATIONS**

TFPI-2 (A-20) is recommended for detection of TFPI-2 of mouse and 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 TFPI-2 siRNA (m): sc-41063, TFPI-2 shRNA Plasmid (m): sc-41063-SH and TFPI-2 shRNA (m) Lentiviral Particles: sc-41063-V.

Molecular Weight of TFPI-2: 27 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.

# **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.

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3801 fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com