**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 X. 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 protease inhibitor that circulates in association with plasma lipoproteins VLDL, LDL, and HDL. TFPI-2 (also known as placental protein 5) is a related glycoprotein that was originally isolated from human placenta.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: TFPI (human) mapping to 2q32.1; Tfpi (mouse) mapping to 2 D.

**SOURCE**

TFPI (G-5) is a mouse monoclonal antibody raised against amino acids 27-146 mapping near the N-terminus of TFPI of mouse origin.

**PRODUCT**

Each vial contains 200 µg IgG, kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

TFPI (G-5) is available conjugated to agarose (sc-365920 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-365920 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-365920 PE), fluorescein (sc-365920 FITC), Alexa Fluor® 488 (sc-365920 AF488), Alexa Fluor® 546 (sc-365920 AF546), Alexa Fluor® 594 (sc-365920 AF594) or Alexa Fluor® 647 (sc-365920 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-365920 AF680) or Alexa Fluor® 790 (sc-365920 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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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.

**APPLICATIONS**

TFPI (G-5) is recommended for detection of precursor and mature forms of TFPI of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µl 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 1:30-1:300).

Suitable for use as control antibody for TFPI siRNA (h): sc-41060, TFPI siRNA (m): sc-41061, TFPI shRNA Plasmid (h): sc-41060-SH, TFPI shRNA Plasmid (m): sc-41061-SH, TFPI shRNA (h) Lentiviral Particles: sc-41060-V and TFPI shRNA (m) Lentiviral Particles: sc-41061-V.

Molecular Weight of TFPI: 40 kDa.

Positive Controls: TFPI (h): 293 Lysate: sc-113167.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG BP-HRP: sc-516102 or m-IgG BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:500-1:200). 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG BP-FITC: sc-516140 or m-IgG BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Hard-set Mounting Medium: sc-24941 or UltraCruz® mounting Medium: sc-359850.

**DATA**

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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