Human TFPI Biotinylated Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: BAF2974

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human TFPI in ELISAs and Western blots. In sandwich immunoassays, less than 0.04% cross-reactivity with recombinant mouse (rm) TFPI, recombinant human TFPI-2, and rmTFPI-2 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human TFPI Asp29-Lys282 Accession # P10646
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details.

APPLICATIONS

Please Note: *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

	Recommended Concentration	Sample
Western Blot	0.1 µg/mL	Recombinant Human TFPI (Catalog # 2974-PI)
Human TFPI Sandwich Immunoassay		**Reagent**
ELISA Capture	2-8 µg/mL	Human TFPI Antibody (Catalog # MAB29741)
ELISA Detection	0.1-0.4 µg/mL	Human TFPI Biotinylated Antibody (Catalog # BAF2974)
Standard		Recombinant Human TFPI (Catalog # 2974-PI)

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Human TFPI, also known as lipoprotein-associated coagulation inhibitor (LACI) and extrinsic pathway inhibitor (EPI), is a physiological inhibitor of extrinsic pathway of coagulation and has biological functions of anticoagulation and anti-inflammation (1). It is a secreted protein with a N-terminal acidic region, three Kunitz (K) domains separated with by two linker regions, and a C-terminal basic region (2). The first K domain (residues 54 to 104) inhibits coagulation factor VIIa complexed to tissue factor (TF). The second K domain (residues 125 to 175) inhibits factor Xa. The third K domain (residues 217 to 267) binds to heparin (3). The C-terminal basic region may have several functions. For example, it plays an important role in binding of TFPI to cell surfaces (2). The purified rhTFPI ends at residue 282 and does not contain the last 20 residues (residues 283 to 302) in the C-terminal region. It inhibits the activity of Recombinant Human Coagulation Factor VII (Catalog # 2338-SE) in the presence of Recombinant Human Coagulation Factor III/Tissue Factor (Catalog # 2339-PA).

References:

1. Bai, H. *et al.* (2005) Thromb Haemost. **93**:1055.
2. Bajaj, M.S. *et al.* (2001) Thromb Haemost. **86**:959.
3. Mine, S. *et al.* (2002) Biochemistry **41**:78.

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