

TAFI (H-58): sc-67300

BACKGROUND

The Thrombin-activatable fibrinolysis inhibitor (TAFI), also designated procarboxypeptidase B2 or procarboxypeptidase U, is a hepatically secreted zymogen that downregulates fibrinolysis when activated by Thrombin. It is synthesized in the liver and circulates in plasma in its proenzyme form. When activated, TAFI removes C-terminal arginine or lysine residues from biologically active peptides such as kinins or anaphylatoxins. TAFI cleaves the lysine residues from Fibrin, which prevents plasminogen from activation into plasmin and retards the lysis of a Fibrin clot. Elevated concentration of TAFI in blood is considered a risk factor for venous thrombosis, whereas a deficiency might contribute to the severity of bleeding disorders in hemophilias A and B. Decreased levels of TAFI are found in chronic liver disease.

REFERENCES

1. Von dem Borne, P.A., et al. 1997. Thrombin-mediated activation of Factor XI results in a Thrombin-activatable fibrinolysis inhibitor-dependent inhibition of fibrinolysis. *J. Clin. Invest.* 99: 2323-2327.
2. Zhao, L., et al. 1999. Identification and characterization of two Thrombin-activatable fibrinolysis inhibitor isoforms. *Thromb. Haemost.* 80: 949-955.
3. Hall, S.W., et al. 1999. Thrombin interacts with thrombomodulin, Protein C and Thrombin-activatable fibrinolysis inhibitor via specific and distinct domains. *J. Biol. Chem.* 274: 25510-25516.
4. Juhan-Vague, I., et al. 2000. Thrombin-activatable fibrinolysis inhibitor antigen levels and cardiovascular risk factors. *Arterioscler. Thromb. Vasc. Biol.* 20: 2156-2161.
5. Bajzar, L. 2000. Thrombin-activatable fibrinolysis inhibitor and an anti-fibrinolytic pathway. *Arterioscler. Thromb. Vasc. Biol.* 20: 2511-2518.
6. van Tilburg, N.H., et al. 2000. Thrombin-activatable fibrinolysis inhibitor and the risk for deep vein thrombosis. *Blood* 95: 2855-2859.
7. Silveira, A., et al. 2001. Plasma procarboxypeptidase U in men with symptomatic coronary artery disease. *Thromb. Haemost.* 84: 364-368.

CHROMOSOMAL LOCATION

Genetic locus: CPB2 (human) mapping to 13q14.13; Cpb2 (mouse) mapping to 14 D3.

SOURCE

TAFI (H-58) is a rabbit polyclonal antibody raised against amino acids 321-378 mapping near the C-terminus of TAFI of human origin.

PRODUCT

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

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

TAFI (H-58) is recommended for detection of Thrombin-activatable fibrinolysis inhibitor of human, mouse 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

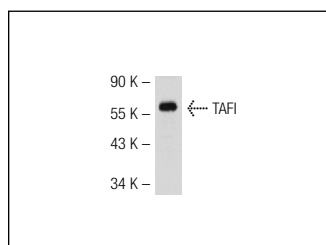
TAFI (H-58) is also recommended for detection of Thrombin-activatable fibrinolysis inhibitor in additional species, including canine.

Suitable for use as control antibody for TAFI siRNA (h): sc-63098, TAFI siRNA (m): sc-63099, TAFI shRNA Plasmid (h): sc-63098-SH, TAFI shRNA Plasmid (m): sc-63099-SH, TAFI shRNA (h) Lentiviral Particles: sc-63098-V and TAFI shRNA (m) Lentiviral Particles: sc-63099-V.

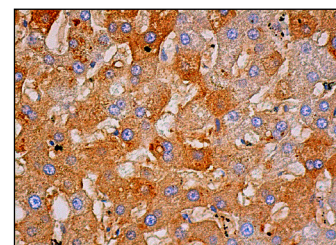
Molecular Weight of TAFI: 48-58 kDa.

Positive Controls: human plasma extract: sc-364374, human PBL whole cell lysate or human platelet extract: sc-363773.

DATA



TAFI (H-58): sc-67300. Western blot analysis of TAFI expression in human PBL whole cell lysate.



TAFI (H-58): sc-67300. Immunoperoxidase staining of formalin fixed, paraffin-embedded human liver tissue showing cytoplasmic staining of hepatocytes.

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.

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Try **TAFI (13H4): sc-59708**, our highly recommended monoclonal alternative to TAFI (H-58).