**Background:** Tissue Factor (TF)/CD142 (Coagulation factor III/Thromboplastin) is a type-I transmembrane glycoprotein that serves as the cell surface receptor and cofactor for blood coagulation factors VII and VIIa, and thus plays a central role in hemostasis and thrombosis (1). The TF:VIIa receptor-ligand complex is widely recognized as the initiator of the extrinsic blood coagulation protease cascade, which ultimately leads to the generation of fibrin and thrombin (1). A member of the type-II cytokine receptor superfamily, TF has also been shown to engage the PI3K (2) and MAPK (3) signaling cascades upon binding to factor VIIa in order to drive cellular responses such as cell migration, growth, and proliferation. Although the function of TF under physiologic conditions is to coordinate blood clotting in response to tissue damage, TF is implicated in pathologic conditions such as tumor progression. Indeed, TF is aberrantly expressed in colorectal cancer, breast cancer, pancreatic cancer, and glioblastoma multiforme (4). It has been shown to promote tumor angiogenesis, tumor growth, metastasis, and venous thrombosis (5). Given that TF overexpression is associated with numerous types of solid tumors, it has garnered much attention as a potential therapeutic target.

**Specificity/Sensitivity:** Tissue Factor/CD142 Antibody recognizes endogenous levels of total Tissue Factor/CD142 protein.

**Source/Purification:** Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Glu123 of human Tissue Factor/CD142 protein. Antibodies are purified by protein A and peptide affinity chromatography.

**Recommended Antibody Dilutions:**
Western blotting 1:1000

**Background References:**
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Western blot analysis of extracts from 293T cells, mock transfected (-) or transfected with a construct expressing Myc/DDK-tagged full-length human tissue factor protein (hTF-Myc/DDK; +), using Tissue Factor/CD142 Antibody (upper), DYKDDDDK Tag Antibody #2368 (middle), and β-Actin (D6A8) Rabbit mAb #8457 (lower).

Western blot analysis of extracts from BxPC-3 cells, PANC-1 cells, and Mia PaCa2 cells using Tissue Factor/CD142 Antibody (upper) and β-Actin (D6A8) Rabbit mAb #8457 (lower). As expected, Tissue Factor/CD142 protein is not detected in either Mia PaCa2 cells or PANC-1 cells.

Western blot analysis of extracts from MDA-MB-231 cells, untreated (-) or treated with PNGase F (+), using Tissue Factor/CD142 Antibody (upper) and β-Actin (D6A8) Rabbit mAb #8457 (lower).

Western blot analysis of extracts from MDA-MB-231 cells, untreated (-) or treated with PNGase F (+), using Tissue Factor/CD142 Antibody (upper) and β-Actin (D6A8) Rabbit mAb #8457 (lower).