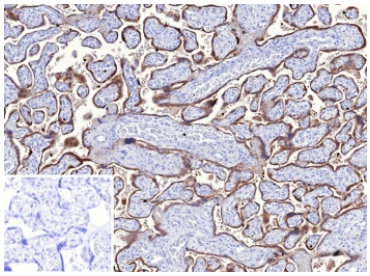
TFPI2 Antibody / Tissue factor pathway inhibitor 2 [clone TFPI2/13025] (V5812)

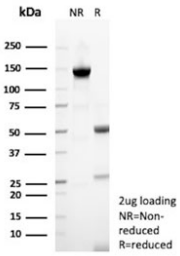
Catalog No.	Formulation	Size
V5812-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V5812-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V5812SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	TFPI2/13025
Purity	Protein G affinity
UniProt	P48307
Localization	Cell membrane, cytoplasm
Applications	Immunohistochemistry (FFPE): 1-2ug/ml
Limitations	This TFPI2 antibody is available for research use only.



Immunohistochemistry analysis of TFPI2 / Tissue factor pathway inhibitor 2 antibody (clone TFPI2/13025) in human placental tissue. Formalin-fixed, paraffin-embedded placenta shows prominent extracellular and pericellular HRP-DAB brown staining outlining chorionic villi and associated trophoblastic structures, consistent with matrix-associated TFPI2 expression. Nuclear counterstain highlights cellular architecture. The inset shows PBS used in place of primary antibody as a negative control, confirming absence of specific staining. Heat-induced epitope retrieval was performed by boiling tissue sections in pH 9 10 mM Tris with 1 mM EDTA for 20 minutes followed by cooling prior to staining.



SDS-PAGE analysis of purified, BSA-free TFPI2 antibody (clone TFPI2/13025) as confirmation of integrity and purity.

Description

TFPI2 antibody, also known as Tissue factor pathway inhibitor 2 antibody, recognizes Tissue factor pathway inhibitor 2, a secreted Kunitz-type serine protease inhibitor encoded by the TFPI2 gene. TFPI2 is a member of the Kunitz protease inhibitor family and was originally described as placental protein 5 in early literature. The protein is synthesized with a signal peptide and secreted into the extracellular space, where it associates with the extracellular matrix and modulates pericellular proteolytic activity. TFPI2 antibody is widely used in research investigating extracellular matrix regulation, tumor invasion, and protease-mediated signaling pathways.

Tissue factor pathway inhibitor 2 contains three tandem Kunitz-type inhibitory domains that enable inhibition of multiple serine proteases, including plasmin, trypsin, and matrix-associated proteases. Through these interactions, TFPI2 plays a regulatory role in extracellular matrix degradation, influencing cell migration, angiogenesis, and tissue remodeling. Although structurally related to Tissue factor pathway inhibitor 1, TFPI2 functions primarily within the extracellular matrix rather than directly controlling the tissue factor coagulation cascade. Its activity contributes to maintaining tissue integrity by limiting excessive proteolysis in inflammatory and tumor microenvironments.

TFPI2 expression has been documented in placenta, vascular endothelium, and various epithelial tissues. In multiple cancer types, TFPI2 expression is frequently reduced due to promoter hypermethylation, and decreased expression has been associated with enhanced invasive behavior. As a result, TFPI2 antibody is commonly employed in studies examining epigenetic regulation, tumor progression, and stromal-epithelial interactions. Because TFPI2 is secreted and matrix-associated, staining patterns are typically extracellular or pericellular in tissue sections. Clone TFPI2/13025 is designed to detect TFPI2 in research applications and supports investigation of extracellular protease inhibition and matrix remodeling mechanisms.

Application Notes

Optimal dilution of the TFPI2 antibody should be determined by the researcher.

Immunogen

A portion of amino acids 100-235 from human Tissue factor pathway inhibitor 2 protein was used as the immunogen for the TFPI2 antibody.

Storage

Aliquot the TFPI2 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

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