

## Monoclonal antibody against human Tissue Factor Product No. ADG4507

### Description

Tissue Factor (TF, CD142) is a 45 kDa transmembrane cell surface glycoprotein known for its role in initiating coagulation. It is comprised of three domains: an extracellular domain (aa 1-219), a hydrophilic spanning domain (aa 220-242) and a cytoplasmic tail (aa 243-263).

### Properties

The monoclonal antibody ADG4507 (clone VIC7, subclass IgG<sub>1</sub>) recognizes an epitope within amino acids 203-214 of human Tissue Factor.<sup>(1)</sup>

Mice were immunized with purified apoprotein of human tissue factor (MW = 47 kDa). The antibody has been purified from cell culture supernatant using Protein A affinity chromatography.

The antibody neutralizes brain and placental thrombo-plastin.

### Presentation

Screw capped vial containing 0.5 mg of purified antibody in PBS pH 7.4, 0.01 % ProClin300. The IgG concentration is 1 mg/ml. Spin the vial briefly before opening.

### Storage and Stability

Store the antibody at 2°-8°C. For long-term storage the antibody should be aliquoted and stored at -20°C or colder. It is recommended to avoid freeze-thaw cycles.

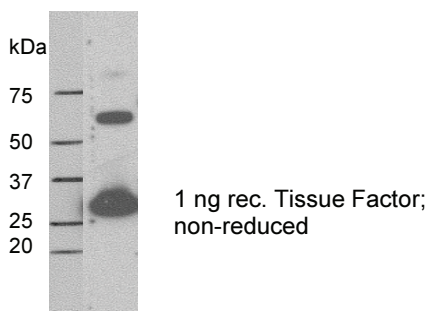
### Applications

#### ELISA

The antibody can be used as capture antibody in ELISAs.<sup>(1, 3)</sup>

#### Western Blot Analysis

The antibody can be used in Western blot analysis, detecting human tissue factor under reducing and non-reducing conditions at a working concentration of 2-10 µg/mL<sup>(8)</sup>



#### Flow Cytometry

The antibody may be used for analyzing tissue factor expression of a wide variety of cell types including monocytes and HUVEC.<sup>(2, 4-6)</sup>

#### Immunohistochemistry

The antibody has been used for immunofluorescence staining and has shown a strong reactivity for tissue factor in frozen tissue sections of both the kidney (glomerular epithelia) and the epidermis (upper cell layer).<sup>(1, 2, 7)</sup>

### Warnings and Precautions

**Contains:** Mixture of: 5-Chloro-2-methyl-4-isothiazolin-3-one and 2-Methyl-2H-isothiazol-3-one (3:1) and Modified alkyl carboxylate (ProClin ® 300)

### Hazard pictograms



Warning

### Signal word

#### Hazard statements

H317 - May cause an allergic skin reaction.

#### Precautionary statements

P280 - Wear protective gloves.

P302 + P352 - IF ON SKIN: Wash with plenty of water.

P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention.

P362 - Take off contaminated clothing and wash before reuse.

P501 - Dispose of contents/container in accordance with local/regional/ national/international regulations.

### References

1. Immunological and functional analyses of the extracellular domain of human tissue factor. Magdolen V *et al.*, *Biol Chem* 1998, **379**: 157-165.
2. Morrissey JH *et al.*, CD142 (tissue factor) Workshop Panel report. In: *Leucocyte Typing VI: white cell differentiation antigens*. Garland Publishing, Inc., New York, 1997, 742-746.
3. Constitutive tissue factor expression of human breast cancer cell line MCF-7 is modulated by growth factors. Flössel C *et al.*, *Eur J Cancer*. 1992;28A(12):1999-2002.
4. The importance of platelets in the expression of monocyte tissue factor antigen measured by a new whole blood flow cytometric assay. Amirhosravi A *et al.*, *Thromb Haemost* 1996, **75**: 87-95.
5. Tissue factor expression on monocyte subpopulations during normal pregnancy. Holmes VA *et al.*, *Thromb Haemost* 2002, **87**: 953-958.
6. Flow cytometric analysis of tissue factor (TF) expression on stimulated monocytes-comparison to procoagulant activity of mononuclear blood cells. Luther T *et al.*, *Blut* 1990, **61**: 375-378.
7. Localization of Tissue Factor in Actin-Filament-Rich Membrane Areas of Epithelial Cells. Müller M *et al.*, *Exp Cell Res* 1999, **248**: 136-147.
8. Role of tissue factor in adhesion of mononuclear phagocytes to and trafficking through endothelium in vitro. Randolph GJ *et al.*, *Blood*. 1998 Dec 1;92(11):4167-4177.

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#### Hinweis/Note:

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The datasheet is for information purposes only. The current datasheet will be enclosed with product shipment.