

Human Coagulation Factor III/Tissue Factor Alexa Fluor® 700-conjugated Antibody

Monoclonal Mouse IgG₁ Clone # 323519

Catalog Number: FAB23391N

DESCRIPTION

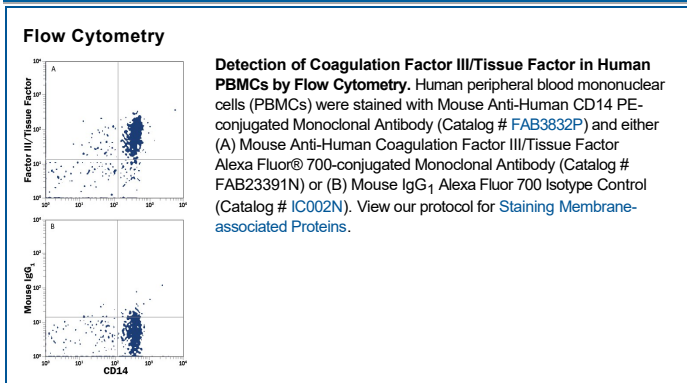
Species Reactivity	Human
Specificity	Detects human Coagulation Factor III/Tissue Factor in direct ELISAs and Western blots. In direct ELISAs and Western blots, no cross-reactivity with recombinant mouse Coagulation Factor III/Tissue Factor is observed.
Source	Monoclonal Mouse IgG ₁ Clone # 323519
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Coagulation Factor III Gly34-Glu251 Accession # P13726
Conjugate	Alexa Fluor 700 Excitation Wavelength: 675-700 nm Emission Wavelength: 723 nm
Formulation	Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

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
Flow Cytometry	0.25-1 µg/10 ⁶ cells	See Below

DATA



PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied.

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BACKGROUND

Coagulation Factor III/Tissue Factor (TF), also known as thromboplastin and CD142, is a 46 kDa type I transmembrane protein that is part of the extrinsic pathway of coagulation. It functions as a protein cofactor/receptor for Coagulation Factor VII, which is synthesized in the liver and circulates in the plasma (1). Upon binding to TF, the inactive Factor VII is rapidly converted into activated Factor VIIa. The resulting 1:1 complex of Factor VIIa and TF activates the coagulation pathway, and, as a soluble form, plays an important coagulation-independent role in processes such as angiogenesis and M1 macrophage development (2-5). TF is synthesized as a 295 amino acid (aa) precursor that consists of a signal peptide (aa 1-32) plus a mature domain (aa 33-295). The mature region contains an extracellular region (aa 33-251), followed by a transmembrane segment (aa 252-274) and a cytoplasmic tail (aa 275-295) (6-9). TF is found on endothelial cells, monocytes, vascular smooth muscle cells, and bronchial epithelium (5, 10-12). Over aa 33-251, human and mouse TF share 58% aa sequence identity.

References:

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