Human Coagulation Factor III/Tissue Factor Alexa Fluor® 488-conjugated Antibody

Monoclonal Mouse IgG_1 Clone # 323519

Catalog Number: FAB23391G

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 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm
Formulation	Supplied 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.

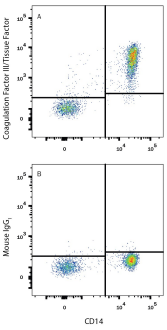
APPLICATIONS

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	5 µL/10^6 cells	See Below

DATA

Flow Cytometry



Detection of Coagulation Factor III/Tissue Factor in Human PBMCs by Flow Cytometry. Human peripheral blood mononuclear cells (PBMCs) were stained with Mouse Anti-Human CD14 APC-conjugated Monoclonal Antibody (Catalog # FAB3832A) and either (A) Mouse Anti-Human Coagulation Factor III/Tissue Factor Alexa Fluor® 488-conjugated Monoclonal Antibody (Catalog # FAB23391G) or (B) Mouse IgG_1 Alexa Fluor 488 Isotype Control (Catalog # IC002G). View our protocol for Staining Membrane-associated Proteins.

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.

BACKGROUND

Coagulation Factor III/Tissue Factor (TF), also known as thromboplastin and CD142, is a 46 kDa integral membrane 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 (2-4). Synthesized as a 295 amino acid (aa) precursor, TF consists of a signal peptide (aa 1-32) and the mature chain (aa 33-295). The mature region contain an extracellular region (aa 33-251), followed by a transmembrane segment (aa 252-274) and a cytoplasmic tail (aa 275-295) (5-8). TF is found on endothelial cells, monocytes and vascular smooth muscle cells. Over aa 33-251, human and mouse TF share 58% aa sequence identity.

References:

1. Morrissey, J.H. (2004) in Handbook of Proteolytic Enzymes. Barrett, A.J. *et al.* (ed) San Diego, Academic Press, p. 1659.
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