

DESCRIPTION

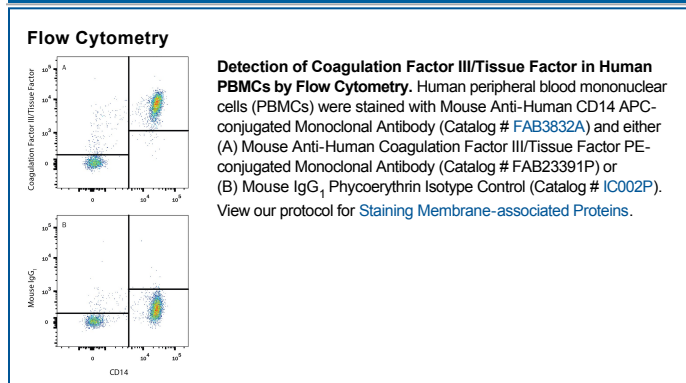
Species Reactivity	Human
Specificity	Detects human Coagulation Factor III/Tissue Factor in direct ELISAs and Western blots. In direct ELISAs and Western blots, no cross-reactivity with recombinant mouse Coagulation Factor III/Tissue Factor is observed.
Source	Monoclonal Mouse IgG ₁ Clone # 323519
Purification	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	Phycoerythrin Excitation Wavelength: 488 nm Emission Wavelength: 565-605 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	10 µL/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. <ul style="list-style-type: none"> ● 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 an integral membrane protein found in a variety of cell types. It functions as a protein cofactor/receptor of Coagulation Factor VII, which is synthesized in the liver and circulated in the plasma (1). Upon binding of TF, the inactive factor VII is rapidly converted into activated VIIa. The resulting 1:1 complex of VIIa and TF initiates the coagulation pathway and has also important coagulation-independent functions such as angiogenesis (2). Synthesized as a 295 amino acid precursor, TF consists of a signal peptide (residues 1-32) and the mature chain (residues 33-295). As a type I membrane protein, it contains a transmembrane region (residues 252-274) and a cytoplasmic tail (residues 275-295) (3-6).

References:

1. Morrissey, J.H. (2004) in Handbook of Proteolytic Enzymes. Barrett, A.J. *et al.* (ed) San Diego, Academic Press, p. 1659.
2. Versteeg, H.H. *et al.* (2003) Carcinogenesis **24**:1009.
3. Scarpati, E.M. *et al.* (1987) Biochemistry **26**:5234.
4. Fisher, K.L. *et al.* (1987) Thromb. Res. **48**:89.
5. Morrissey, J.H. *et al.* (1987) Cell **50**:129.
6. Spicer, E.K. (1987) Proc. Natl. Acad. Sci. USA **84**:5148.