

DESCRIPTION

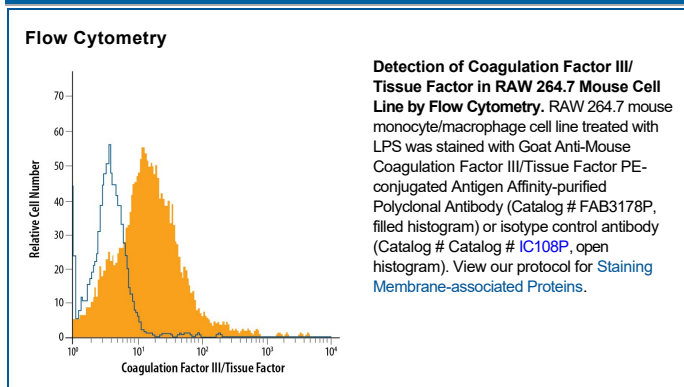
Species Reactivity	Mouse
Specificity	Detects mouse Coagulation Factor III in direct ELISAs and Western blots. In direct ELISAs and Western blots, approximately 5% cross-reactivity with recombinant human Coagulation Factor III is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse Coagulation Factor III/Tissue Factor Ala29-Glu251 Accession # P20352
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 μ L/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 294 amino acid precursor, mouse TF consists of a signal peptide (residues 1-28) and the mature chain (residues 29-294). As a type I membrane protein, it contains a transmembrane region (residues 252-274) and a cytoplasmic tail (residues 275-294) (3, 4). The purified rmTF corresponds to the ectodomain (residues 29-251) and is potent in activating thermolysin-processed rmCoagulation Factor VII (R&D Systems, Catalog # 3305-SE) under the conditions described in the Activity Assay Protocol.

References:

- Morrissey, J.H. (2004) in *Handbook of Proteolytic Enzymes*. Barrett, A.J. *et al.* (ed) Academic Press, San Diego, p. 1659.
- Versteeg, H.H. *et al.* (2003) *Carcinogenesis* **24**:1009.
- Ranganathan, G. *et al.* (1991) *J. Biol. Chem.* **266**:496.
- Hartzell, S. (1989) *Mol. Cell. Biol.* **9**:2567.