



Mouse anti Human Tissue Factor monoclonal antibody [FITC] (CABT-L424)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Specificity	Prior to conjugation, this antibody was specific for tissue factor as demonstrated by ELISA.
Target	Tissue Factor
Immunogen	Recombinant human tissue factor.
Isotype	IgG2a
Source/Host	Mouse
Species Reactivity	Human
Conjugate	FITC
Applications	ELISA
Format	Liquid
Size	100 µg
Buffer	Phosphate-buffered saline containing 1 mg/mL bovine albumin and 0.1% sodium azide (w/v), pH 7.4.
Preservative	0.1% Sodium Azide
Storage	Store at 2°C to 8°C and protect from light.

BACKGROUND

Introduction	Tissue Factor (TF) is an integral membrane glycoprotein expressed in the plasma membranes
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of many cell types. It is a single chain molecule of 44 kDa consisting of an extra-cellular domain (residues 1-219), a trans-membrane domain (residues 220-242) and the C-terminal intracellular domain of residues 243-263. Most abundant in the tissue adventitia, TF becomes exposed to blood at the site of vascular injury. The availability of TF is important in initiating coagulation by acting as a receptor for both the zymogen and protease forms of plasma factor VII (F.VII and F.VIIa), as well as mediating the conversion of bound F.VII to F.VIIa. The binding of F.VII to TF in the presence of a negatively charged surface such as a phospholipid (or cell surface) promotes the auto activation of F.VII by VIIa. The TF-F.VIIa complex in the presence of calcium ions proteolytically activates factors IX and X. These enzyme products are then capable of activating F.VII to F.VIIa by feedback amplification. The activity of TF-F.VIIa activity is regulated by a TFPI (tissue factor pathway inhibitor), a member of the Kunin superfamily of protease inhibitors. TFPI contains three kunitz domains and is able to bind and inhibit the TF-F.VIIa complex in the presence of activated factor X and calcium ions. Antithrombin has also been reported to inhibit F.VIIa activity in the presence of TF and heparin. Although a membrane protein, low levels of TF products have been demonstrated in plasma. Increased levels of circulating TF products may be a risk factor for thrombotic disease.

Keywords F3;coagulation factor III;thromboplastin, tissue factor;TF;TFA;CD142;tissue factor

GENE INFORMATION

Entrez Gene ID [2152](#)

UniProt ID [P13726](#)