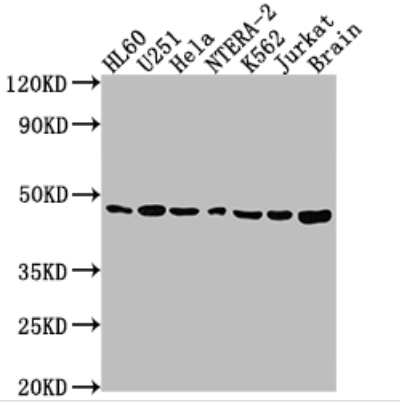
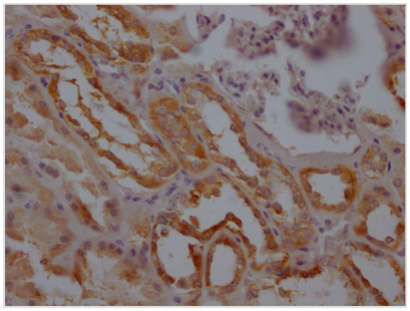
F3 Recombinant Monoclonal Antibody

Product Code	CSB-RA776663A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P13726
Immunogen	A synthesized peptide derived from human Tissue Factor
Species Reactivity	Human, Rat
Tested Applications	ELISA, WB, IHC; Recommended dilution: WB:1:500-1:5000, IHC:1:50-1:200
Relevance	Initiates blood coagulation by forming a complex with circulating factor VII or VIIa. The [TF:VIIa] complex activates factors IX or X by specific limited protolysis. TF plays a role in normal hemostasis by initiating the cell-surface assembly and propagation of the coagulation protease cascade.
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Cardiovascular; Metabolism
Gene Names	F3
Clone No.	8B10

Image



Western Blot
Positive WB detected in: HL60 whole cell lysate, U251 whole cell lysate, Hela whole cell lysate, NTERA-2 whole cell lysate, K562 whole cell lysate, Jurkat whole cell lysate, Rat brain tissue
All lanes: F3 antibody at 1:1500
Secondary
Goat polyclonal to rabbit IgG at 1/50000 dilution
Predicted band size: 34, 28 kDa
Observed band size: 46 kDa



IHC image of CSB-RA776663A0HU diluted at 1:100 and staining in paraffin-embedded human kidney tissue performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4? overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.

Description

The F3 recombinant monoclonal antibody synthesis involves protein technology and DNA recombinant technology. Initially, mice are immunized with a synthesized peptide from human tissue factor. After some time, the spleen of the mice is extracted aseptically and the total RNA of spleen cells is obtained. The cDNA synthesized through RNA reverse transcription is then used as a template to amplify the F3 antibody gene using PCR. The obtained gene is introduced into a vector, which is then transfected into host cells and cultured. The F3 recombinant monoclonal antibody is purified from the supernatant of cell culture using affinity chromatography. It has undergone rigorous verification and is suitable for human and rat F3 protein detection in ELISA, WB, and IHC experiments.

Coagulation factor III (F3), also known as tissue factor (TF), is a transmembrane protein that plays a critical role in the initiation of the coagulation cascade, which is essential for the formation of blood clots to stop bleeding. In response to tissue injury, TF is exposed to the bloodstream and forms a complex with coagulation factor VII, which is activated to factor VIIa by a tissue factor-dependent protease. This TF-FVIIa complex then activates the downstream factors in the coagulation cascade, leading to the generation of thrombin and the formation of a blood clot. TF has been shown to have additional functions, including regulation of angiogenesis, inflammation, and cell survival. TF has also been implicated in various disease states, including thrombotic disorders and cancer.