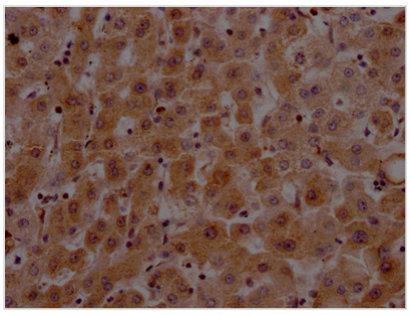
F2 Recombinant Monoclonal Antibody

Product Code	CSB-RA912740A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P00734
Immunogen	A synthesized peptide derived from human Prothrombin
Species Reactivity	Human
Tested Applications	ELISA, IHC; Recommended dilution: IHC:1:50-1:200
Relevance	Thrombin, which cleaves bonds after Arg and Lys, converts fibrinogen to fibrin and activates factors V, VII, VIII, XIII, and, in complex with thrombomodulin, protein C. Functions in blood homeostasis, inflammation and wound healing.
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; Cell biology; Signal transduction
Gene Names	F2
Clone No.	9A1

Image



IHC image of CSB-RA912740A0HU diluted at 1:100 and staining in paraffin-embedded human liver 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 F2 recombinant monoclonal antibody can detect human F2 protein in ELISA and IHC applications. It is produced using recombinant DNA technology, wherein the gene coding for the F2 monoclonal antibody is synthesized by sequencing the cDNA of the F2 antibody-producing hybridomas. The hybridomas are generated by fusing myeloma cells with B cells that were

isolated from an animal immunized with a synthesized peptide derived from human prothrombin. The synthesized gene is then inserted into a vector and transfected into cells for cultivation. The resulting F2 recombinant monoclonal antibody is purified from the cell culture supernatant through affinity chromatography.

Coagulation factor II (F2), also known as prothrombin, is a protein that plays an essential role in the blood clotting process. In response to injury, prothrombin is converted to thrombin, an enzyme that converts fibrinogen to fibrin. Fibrin forms a mesh-like network that stabilizes the blood clot and stops bleeding. The activation of prothrombin to thrombin is a critical step in the coagulation cascade and requires the presence of other factors and cofactors.