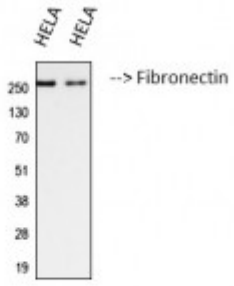
Anti-Fibronectin antibody



Western Blot (WB) analysis of HELA cells using Fibronectin Monoclonal Antibody from two batches. (STJ97039)

Description	Fibronectin is a protein encoded by the FN1 gene which is approximately 262,6 kDa. Fibronectin is secreted into the extracellular matrix. It is involved in RET signalling, ERK signalling and the integrin pathway. It is a glycoprotein present in a soluble dimeric form in plasma, and in either a dimeric or multimeric form at the cell surface and in extracellular matrix. It is involved in cell adhesion and migration processes including embryogenesis, wound healing, blood coagulation, host defence, and metastasis. Fibronectin is expressed in the nervous system, bone, liver and muscle. Mutations in the FN1 gene may result in calciphylaxis. STJ97039 was developed from clone M9 and was affinity-purified from mouse ascites by affinity-chromatography using specific immunogen. The antibody detects endogenous Fibronectin protein.

Model	STJ97039
Host	Mouse
Reactivity	Human, Mouse, Rat
Applications	WB
Immunogen	Synthetic Peptide
Gene ID	2335
Gene Symbol	FN1
Dilution range	WB 1:1000-2000
Specificity	The antibody detects endogenous Fibronectin protein.
Tissue Specificity	Plasma FN (soluble dimeric form) is secreted by hepatocytes. Cellular FN (dimeric or cross-linked multimeric forms), made by fibroblasts, epithelial and

	other cell types, is deposited as fibrils in the extracellular matrix. Ugl-Y1, Ugl-Y2 and Ugl-Y3 are found in urine.
Purification	The antibody was affinity-purified from mouse ascites by affinity-chromatography using specific immunogen.
Clone ID	M9
Note	For Research Use Only (RUO).
Protein Name	Fibronectin FN Cold-insoluble globulin CIG Anastellin Ugl-Y1 Ugl-Y2 Ugl-Y3
Clonality	Monoclonal
Conjugation	Unconjugated
Isotype	IgG1
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:3778OMIM:135600
Alternative Names	Fibronectin FN Cold-insoluble globulin CIG Anastellin Ugl-Y1 Ugl-Y2 Ugl-Y3
Function	Fibronectins bind cell surfaces and various compounds including collagen, fibrin, heparin, DNA, and actin. Fibronectins are involved in cell adhesion, cell motility, opsonization, wound healing, and maintenance of cell shape. Involved in osteoblast compaction through the fibronectin fibrillogenesis cell-mediated matrix assembly process, essential for osteoblast mineralization. Participates in the regulation of type I collagen deposition by osteoblasts.; Anastellin binds fibronectin and induces fibril formation. This fibronectin polymer, named superfibronectin, exhibits enhanced adhesive properties. Both anastellin and superfibronectin inhibit tumor growth, angiogenesis and metastasis. Anastellin activates p38 MAPK and inhibits lysophospholipid signaling.
Cellular Localization	Secreted, extracellular space, extracellular matrix.
Post-translational Modifications	Sulfated. It is not known whether both or only one of Thr-2064 and Thr-2065 are/is glycosylated. Forms covalent cross-links mediated by a transglutaminase, such as F13A or TGM2, between a glutamine and the epsilon-amino group of a lysine residue, forming homopolymers and heteropolymers (e.g. fibrinogen-fibronectin, collagen-fibronectin heteropolymers).; Phosphorylated by FAM20C in the extracellular medium. Proteolytic processing produces the C-terminal NC1 peptide, anastellin.; Some lysine residues are oxidized to allysine by LOXL3, promoting fibronectin activation and matrix formation.