

Vinculin (phospho Tyr821) Polyclonal Antibody

Catalog No :	YP1151
Reactivity :	Human;Mouse;Rat
Applications :	WB;IHC;IF;ELISA
Target :	Vinculin
Fields :	>>Focal adhesion;>>Adherens junction;>>Leukocyte transendothelial migration;>>Regulation of actin cytoskeleton;>>Bacterial invasion of epithelial cells;>>Shigellosis;>>Amoebiasis
Gene Name :	VCL
Protein Name :	Vinculin
Human Gene Id :	7414
Human Swiss Prot No :	P18206
Mouse Gene Id :	22330
Mouse Swiss Prot No :	Q64727
Rat Gene Id :	305679
Rat Swiss Prot No :	P85972
Immunogen :	The antiserum was produced against synthesized peptide derived from human Vinculin around the phosphorylation site of Tyr821. AA range:786-835
Specificity :	Phospho-Vinculin (Y821) Polyclonal Antibody detects endogenous levels of Vinculin protein only when phosphorylated at Y821.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Polyclonal, Rabbit,IgG

Dilution : WB 1:500-2000 IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:20000. Not yet tested in other applications.

Purification : The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

Concentration : 1 mg/ml

Storage Stability : -15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight : 124kD

Cell Pathway : Focal adhesion;Adherens_Junction;Leukocyte transendothelial migration;Regulates Actin and Cytoskeleton;

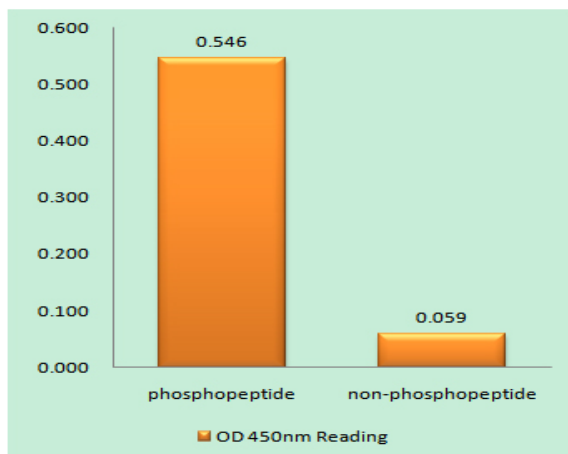
Background : Vinculin is a cytoskeletal protein associated with cell-cell and cell-matrix junctions, where it is thought to function as one of several interacting proteins involved in anchoring F-actin to the membrane. Defects in VCL are the cause of cardiomyopathy dilated type 1W. Dilated cardiomyopathy is a disorder characterized by ventricular dilation and impaired systolic function, resulting in congestive heart failure and arrhythmia. Multiple alternatively spliced transcript variants have been found for this gene, but the biological validity of some variants has not been determined. [provided by RefSeq, Jul 2008],

Function : disease:Defects in VCL are the cause of cardiomyopathy dilated type 1W (CMD1W) [MIM:611407]. Dilated cardiomyopathy is a disorder characterized by ventricular dilation and impaired systolic function, resulting in congestive heart failure and arrhythmia. Patients are at risk of premature death.,function:Involved in cell adhesion. May be involved in the attachment of the actin-based microfilaments to the plasma membrane. May also play important roles in cell morphology and locomotion.,online information:Vinculin entry,PTM:Aceylated; mainly by myristic acid but also small amount of palmitic acid.,PTM:Phosphorylated; on serines, threonines and tyrosines. Phosphorylation on Tyr-1133 in activated platelets affects head-tail interactions and cell spreading but has no effect on actin binding nor on localization to focal adhesion plaques.,similarity:Belongs to the vinculin/alpha-catenin family.,s

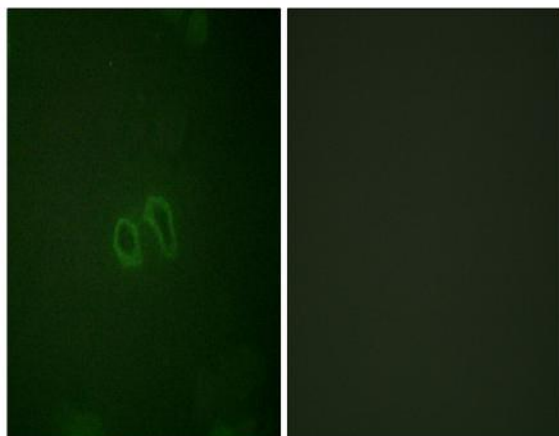
Subcellular Location : Cell membrane ; Peripheral membrane protein ; Cytoplasmic side . Cell junction, adherens junction . Cell junction, focal adhesion . Cytoplasm, cytoskeleton . Cell membrane, sarcolemma ; Peripheral membrane protein ; Cytoplasmic side . Recruitment to cell-cell junctions occurs in a myosin II-dependent manner. Interaction with CTNNB1 is necessary for its localization to the cell-cell junctions.

Expression : Metavinculin is muscle-specific.

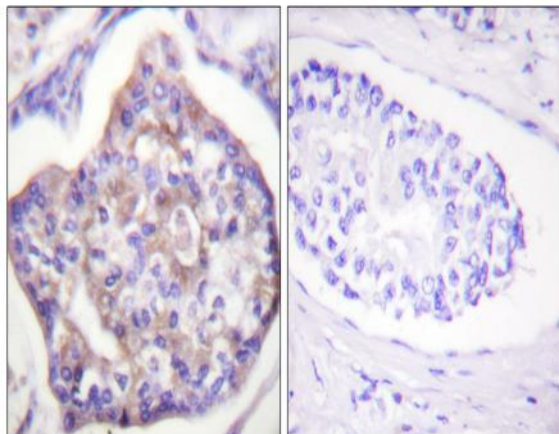
Products Images



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using Vinculin (Phospho-Tyr821) Antibody



Immunofluorescence analysis of HepG2 cells, using Vinculin (Phospho-Tyr821) Antibody. The picture on the right is blocked with the phospho peptide.



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using Vinculin (Phospho-Tyr821) Antibody. The picture on the right is blocked with the phospho peptide.