



Vinculin (phospho Tyr821) Polyclonal Antibody

Catalog No	YP-Ab-16911
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;IHC;IF;ELISA
Gene Name	VCL
Protein Name	Vinculin
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
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/20000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	VCL; Vinculin; Metavinculin
Observed Band	
Cell Pathway	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. .
Tissue Specificity	Metavinculin is muscle-specific.
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:Acetylated; 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

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],

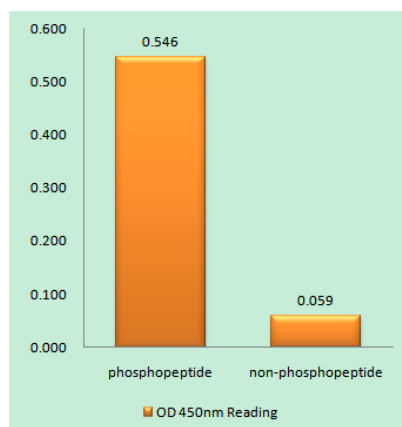
matters needing attention

Avoid repeated freezing and thawing!

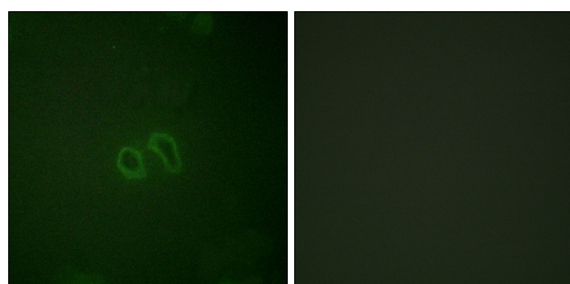
Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

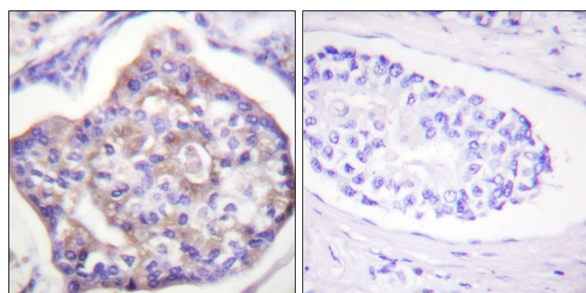
Products Images



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 phosphopeptide.



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