CSRP3 Rabbit pAb

Catalog No	YP-Ab-18426
Isotype	IgG
Reactivity	Human,Mouse,Rat
Applications	WB
Gene Name	CSRP3 CLP MLP
Protein Name	Cysteine and glycine-rich protein 3 (Cardiac LIM protein) (Cysteine-rich protein 3) (CRP3) (LIM domain protein, cardiac) (Muscle LIM protein)
Immunogen	Synthesized peptide derived from human CSRP3
Specificity	This antibody detects endogenous levels of CSRP3 at Human, Mouse,Rat
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	
Observed Band	21kD
Cell Pathway	
Tissue Specificity	Nucleus . Cytoplasm . Cytoplasm, cytoskeleton . Cytoplasm, myofibril, sarcomere, Z line . Cytoplasm, myofibril, sarcomere . Nucleocytoplasmic shuttling protein. Mainly cytoplasmic. In the Z line, found associated with GLRX3 (By similarity). .; [Isoform 2]: Cytoplasm, myofibril, sarcomere, Z line .
Function	Positive regulator of myogenesis. Acts as cofactor for myogenic bHLH transcription factors such as MYOD1, and probably MYOG and MYF6. Enhances the DNA-binding activity of the MYOD1:TCF3 isoform E47 complex and may promote formation of a functional MYOD1:TCF3 isoform E47:MEF2A complex involved in myogenesis (By similarity). Plays a crucial and specific role in the organization of cytosolic structures in cardiomyocytes. Could play a role in mechanical stretch sensing. May be a scaffold protein that promotes the assembly of interacting proteins at Z-line structures. It is essential for calcineurin anchorage to the Z line. Required for stress-induced calcineurin-NFAT activation (By similarity). The role in regulation of cytoskeleton dynamics by association with CFL2 is reported conflictingly: Shown to enhance CFL2-mediated F-actin depolymerization dependent on the CSRP3:CFL2 molecular ratio, and also shown to reduce the ability of CLF1 and CFL2 to enhance actin depolymerization .

	Proposed to contribute to the maintenance of muscle cell integrity through an actin-based mechanism. Can directly bind to actin filaments, cross-link actin filaments into bundles without polarity selectivity and protect them from dilution- and cofilin-mediated depolymerization; the function seems to involve its self-association . In vitro can inhibit PKC/PRKCA activity . Proposed to be involved in cardiac stress signaling by down-regulating excessive PKC/PRKCA signaling (By similarity). ; [Isoform 2]: May play a role in early sarcomere organization. Overexpression in myotubes negatively regulates myotube differentiation. By association with isoform 1 and thus changing the CSRP3 isoform 1:CFL2 stoichiometry is proposed to down-regulate CFL2-mediated F-actin depolymerization.
Background	
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

Cardiac and slow-twitch skeletal muscles. Isoform 2 is expressed in striated muscle. Isoform 2 is specifically expressed at higher levels in patients with neuromuscular diseases, such as limb-girdle muscular dystrophy 2A (LGMD2A), Duchenne muscular dystrophy (DMD) and dermatomyositis (PubMed:24860983).