

AB-PN836

MRLC1-pT19+pS20 Antibody

Phosphosite-specific rabbit polyclonal antibody for MRLC1. This phosphothreonine-site antibody is highly specific for phosphothreonine in the phosphosite.

Website: www.kinexus.ca
Email: info@kinexus.ca
Phone: 604-323-2547



Address: 8755 Ash Street, Suite 1
Vancouver, British Columbia,
Canada V6P 6T3

Target Protein

Protein Name Long:	Myosin regulatory light polypeptide 9
Protein Alias:	LC20; MLC2; MLC20; MLRN; Myosin regulatory light chain 1; Myosin regulatory light chain 2, smooth muscle isoform; Myosin regulatory light chain 9; Myosin RLC; Myosin, light chain 9, regulatory; MYRL2
UniProt ID:	P24844
Protein Molecular Mass:	19,827 Da (172 AA)

Immunogen

Antibody Immunogen Source:	Synthetic phosphopeptide patterned after human MRLC1
Antibody Immunogen Sequence:	C(βA)QRA(pT)SNV
Antibody Immunogen Description:	Corresponds to amino acid residues Q16 to V23. T19 and S20 phosphorylation stimulates contractile response and induces cytoskeletal reorganization. These are the major <i>in vivo</i> phosphorylation sites in MOR1 based on ≥333 and ≥358 high throughput mass spectrometry reports, respectively, in PhosphoSitePlus. MRLC1 is known to be phosphorylated <i>in vitro</i> at T19 by CRIK, DAPK3 (ZIPK), ILK, MYLK1 (smMLCK), MYLK2 (skMLCK), PAK1, PKAcA (PRKACA), ROCK1 (ROK-beta), and ROCK2 (ROK-alpha), at S20 by AurKB (AurB, STK12), CamK1a, CRIK, DAPK1, DAPK2, DAPK3 (ZIPK), ILK, MRCKa (CDC42BPA, PK428), MYLK1 (smMLCK), MYLK2 (skMLCK), PAK1, PAK3 (STK4), PKAcA (PRKACA), PKCa (PRKCA), ROCK1 (ROK-beta), and ROCK2 (ROK-alpha).
Antibody Target Type:	Phosphosite-specific

Production

Antibody Host Species:	Rabbit
Antibody Type:	Polyclonal
Antibody Isotype:	IgG
Production Method:	The immunizing peptide was produced by solid phase synthesis on a multi-peptide synthesizer and purified by reverse-phase hplc chromatography. Purity was assessed by analytical hplc and the amino acid sequence confirmed by mass spectrometry analysis. This peptide was coupled to KLH prior to immunization into rabbits. New Zealand White rabbits were subcutaneously injected with KLH-coupled immunizing peptide every 4 weeks for 4 months. The sera from these animals was applied onto an agarose column to which the immunogen peptide was thio-linked. Antibody was eluted from the column with 0.1 M glycine, pH 2.5. Subsequently, the antibody solution was neutralized to pH 7.0 with saturated Tris.
Amount:	25 µg
Antibody Concentration:	0.7 mg/ml
Storage Buffer:	Phosphate buffered saline pH 7.4, 0.05% Thimerasol

Storage Conditions:	For long term storage, keep frozen at -40°C or lower. Stock solution can be kept at +4°C for more than 3 months. Avoid repeated freeze-thaw cycles.
Storage Stability:	>2 years

Applications

Product Use:	Western blotting Antibody microarray
Antibody Dilution Recommended:	2 µg/ml for immunoblotting
Antibody Species Reactivity:	Human Chimpanzee Rhesus macaque Dog Rat Mouse Platypus Chicken Frog Zebra fish Fruit fly Honey bee Nematode worm

This product is for *in vitro* research use only and is not intended for use in humans or animals.

For more information on our products please visit <https://kinexus-ca.myshopify.com/> or contact us at 1-866-546-3987