Product name:	SPEG Rabbit Polyclonal Antibody
Cat number:	ABN18180
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	Synthesized peptide derived from part region of human protein
Reactivity:	Human,Rat,Mouse
Applications:	IHC 1:50-1:300,ICC/IF 1:50-1:200
Molecular Weight:	359kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

Background:

This gene encodes a protein with similarity to members of the myosin light chain kinase family. This protein family is required for myocyte cytoskeletal development. Along with the desmin gene, expression of this gene may be controlled by the desmin locus control region. Mutations in this gene are associated with centronuclear myopathy 5. [provided by RefSeq, Jun 2016],catalytic activity:ATP + a protein = ADP + a phosphoprotein.,function:Isoform 3 may have a role in regulating the growth and differentiation of arterial smooth muscle cells.,induction:Isoform 3 is quickly down-regulated in response to vascular injury, when ASMC cells change from a quiescent to a proliferative phenotype.,miscellaneous:Expression is under the tight control of the locus control region (LCRs).,PTM:May be autophosphorylated. Phosphorylated upon DNA damage, probably by ATM or ATR.,similarity:Belongs to the protein kinase superfamily. CAMK Ser/Thr protein kinase family.,similarity:Contains 2 fibronectin type-III domains.,similarity:Contains 2 protein kinase domains.,similarity:Contains 9 Ig-like (immunoglobulin-like) domains.,subunit:Isoform 3 is found as a monomer or homodimer.,tissue specificity:Isoform 1 is preferentially expressed in striated muscle. Non-kinase form such as isoform 3 is predominantly espressed in the aorta. Isoform 3 appears to be expressed only in highly differentiated ASMC in normal vessel walls and down-regulated in dedifferentiated ASMC in vivo. In response to vascular injuries ASMC dedifferentiate and change from a quiescent and contractile phenotype to a proliferative and synthetic phenotype. This proliferation of vascular smooth muscle cells is one of the most prominent features of arteriosclerosis.,