



# SPEG Polyclonal Antibody

<b>Catalog No</b>	YP-Ab-06241
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Rat;Mouse
<b>Applications</b>	IHC;IF
<b>Gene Name</b>	SPEG APEG1 KIAA1297
<b>Protein Name</b>	Striated muscle preferentially expressed protein kinase (EC 2.7.11.1) (Aortic preferentially expressed protein 1) (APEG-1)
<b>Immunogen</b>	Synthesized peptide derived from part region of human protein
<b>Specificity</b>	SPEG Polyclonal Antibody detects endogenous levels of protein.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, and 0.02% sodium azide.
<b>Source</b>	Polyclonal, Rabbit,IgG
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	IHC-p 1:50-300. IF 1:50-200
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	
<b>Observed Band</b>	359kD
<b>Cell Pathway</b>	[Isoform 3]: Nucleus.
<b>Tissue Specificity</b>	Isoform 1 is preferentially expressed in striated muscle. Non-kinase form such as isoform 3 is predominantly expressed 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 atherosclerosis.
<b>Function</b>	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

**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],

**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



Immunohistochemical analysis of paraffin-embedded human tonsil. 1, Tris-EDTA,pH9.0 was used for antigen retrieval. 2 Antibody was diluted at 1:200(4° overnight).3,Secondary antibody was diluted at 1:200(room temperature, 45min).