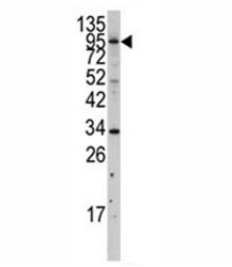
MYLK3 Antibody / Myosin light chain kinase 3 (F40165)

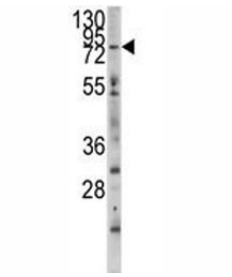
Catalog No.	Formulation	Size
F40165-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F40165-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

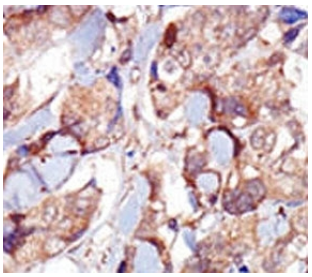
Availability	1-3 business days
Species Reactivity	Human, Mouse
Format	Purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Purified
UniProt	Q32MK0
Applications	Western blot: 1:1000 IHC (Paraffin): 1:50-1:100
Limitations	This MYLK3 antibody is available for research use only.



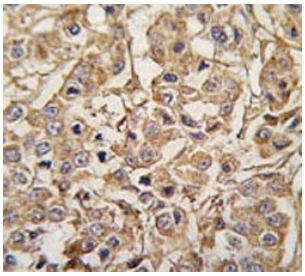
Western blot analysis of MYLK3 antibody and A375 lysate.



Western blot analysis of MYLK3 antibody and mouse heart tissue lysate



IHC analysis of FFPE human breast carcinoma tissue stained with the MYLK3 antibody



IHC analysis of FFPE human breast carcinoma tissue stained with MYLK3 antibody

Description

MYLK3, a member of the Ser/Thr protein kinase family, is a calcium/calmodulin-dependent enzyme responsible for smooth muscle contraction via phosphorylation of a specific serine in the N-terminus of myosin light chains (MLC), an event that facilitates myosin interaction with actin filaments. It is a central determinant in the development of vascular permeability and tissue edema formation. In the nervous system it has been shown to control the growth initiation of astrocytic processes in culture and to participate in transmitter release at synapses formed between cultured sympathetic ganglion cells. MLCK acts as a critical participant in signaling sequences that result in fibroblast apoptosis. Smooth muscle and non-muscle isozymes are expressed in a wide variety of adult and fetal tissues and in cultured endothelium with qualitative expression appearing to be neither tissue- nor development-specific. Non-muscle isoform 2 is the dominant splice variant expressed in various tissues. The Telokin isoform, which binds calmodulin, has been found in a wide variety of adult and fetal tissues. MLCK is probably down-regulated by phosphorylation. The protein contains 1 fibronectin type III domain and 9 immunoglobulin-like C2-type domains.

Application Notes

Titration of the MYLK3 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 40-69 from the human protein was used as the immunogen for this MYLK3 antibody.

Storage

Aliquot the MYLK3 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

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