Datasheet for ABIN710246

anti-MAPK7 antibody (pSer496)

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Overview

Quantity:	100 µL
Target:	MAPK7
Binding Specificity:	pSer496
Reactivity:	Human, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This MAPK7 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunofluorescence (Cultured Cells) (IF (cc)), Immunofluorescence (Paraffin-embedded Sections) (IF (p)), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Immunohistochemistry (Frozen Sections) (IHC (fro))

Product Details

Immunogen:	KLH conjugated synthetic phosphopeptide derived from human ERK5 around the phosphorylation site of Ser496 [GP(p-S)AP]
Isotype:	IgG
Cross-Reactivity:	Human, Mouse
Predicted Reactivity:	Rat
Purification:	Purified by Protein A.

Target Details

Target:	MAPK7

Target Details

Alternative Name:	ERK5 (MAPK7 Products)
Background:	Synonyms: BMK1, ERK4, ERK5, PRKM7, Mitogen-activated protein kinase 7, MAP kinase 7, MAPK 7, Big MAP kinase 1, BMK-1, Extracellular signal-regulated kinase 5, ERK-5, MAPK7 Background: Plays a role in various cellular processes such as proliferation, differentiation and cell survival. The upstream activator of MAPK7 is the MAPK kinase MAP2K5. Upon activation, it translocates to the nucleus and phosphorylates various downstream targets including MEF2C. EGF activates MAPK7 through a Ras-independent and MAP2K5-dependent pathway. May have a role in muscle cell differentiation. May be important for endothelial function and maintenance of blood vessel integrity. MAP2K5 and MAPK7 interact specifically with one another and not with MEK1/ERK1 or MEK2/ERK2 pathways. Phosphorylates SGK1 at Ser-78 and this is required for growth factor-induced cell cycle progression. Involved in the regulation of p53/TP53 by disrupting the PML-MDM2 interaction.
Gene ID:	5598
UniProt:	Q13164
Pathways:	MAPK Signaling, Neurotrophin Signaling Pathway, Activation of Innate immune Response, cAMP Metabolic Process, Toll-Like Receptors Cascades, Negative Regulation of intrinsic apoptotic Signaling

Application Details

Application Notes:	WB 1:300-5000
	ELISA 1:500-1000
	IHC-P 1:200-400
	IHC-F 1:100-500
	IF(IHC-P) 1:50-200
	IF(IHC-F) 1:50-200
	IF(ICC) 1:50-200

Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	1 μg/μL
Buffer:	0.01M TBS(pH 7.4) with 1 % BSA, 0.02 % Proclin300 and 50 % Glycerol.

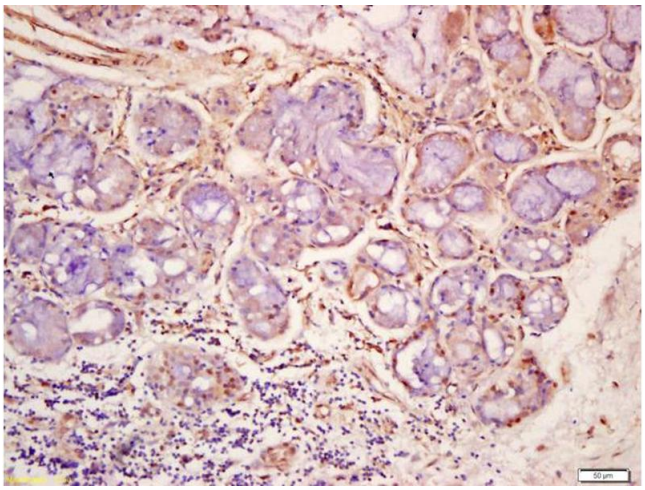
Handling

Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.
Expiry Date:	12 months

Publications

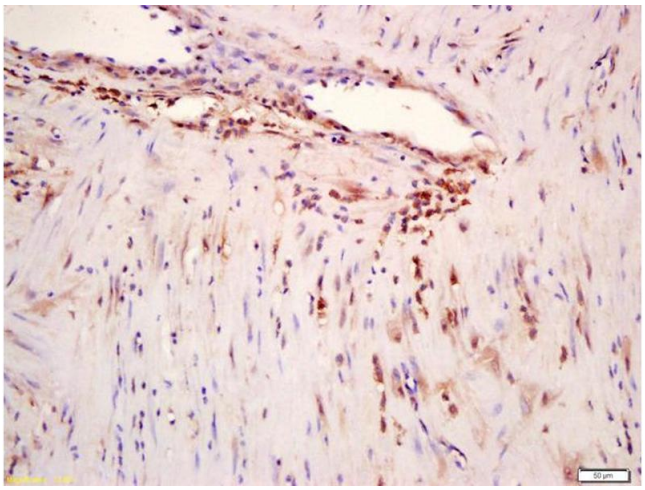
Product cited in:	Zhuang, Zhang, Xiong, Wang, Luo, Han, Meng, Zhang, Liao, Liu: "CDK5 functions as a tumor promoter in human colorectal cancer via modulating the ERK5-AP-1 axis." in: **Cell death & disease**, Vol. 7, Issue 10, pp. e2415, (2017) (PubMed).

Images



Immunohistochemistry

Image 1. Formalin-fixed and paraffin embedded human lung carcinoma labeled with Anti-phospho-ERK5 (Ser496) Polyclonal Antibody, Unconjugated (ABIN710246) at 1:200 followed by conjugation to the secondary antibody and DAB staining



Immunohistochemistry

Image 2. Formalin-fixed and paraffin embedded human myometrium labeled with Anti-phospho-ERK5 (Ser496) Polyclonal Antibody, Unconjugated (ABIN710246) at 1:200 followed by conjugation to the secondary antibody and DAB staining