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HIPK1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12465b

Product Information

Application	WB, IHC-P, E
Primary Accession	Q86Z02
Other Accession	O88904, NP_938009.1, NP_938010.1
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB09623
Calculated MW	130843
Antigen Region	893-922

Additional Information

Gene ID	204851
Other Names	Homeodomain-interacting protein kinase 1, Nuclear body-associated kinase 2, HIPK1, KIAA0630, MYAK, NBAK2
Target/Specificity	This HIPK1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 893-922 amino acids from the C-terminal region of human HIPK1.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	HIPK1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	HIPK1
Synonyms	KIAA0630, MYAK, NBAK2

Function	Serine/threonine-protein kinase involved in transcription regulation and TNF-mediated cellular apoptosis. Plays a role as a corepressor for homeodomain transcription factors. Phosphorylates DAXX and MYB. Phosphorylates DAXX in response to stress, and mediates its translocation from the nucleus to the cytoplasm. Inactivates MYB transcription factor activity by phosphorylation. Prevents MAP3K5-JNK activation in the absence of TNF. TNF triggers its translocation to the cytoplasm in response to stress stimuli, thus activating nuclear MAP3K5-JNK by derepression and promoting apoptosis. May be involved in anti-oxidative stress responses. Involved in the regulation of eye size, lens formation and retinal lamination during late embryogenesis. Promotes angiogenesis and to be involved in erythroid differentiation. May be involved in malignant squamous cell tumor formation. Phosphorylates PAGE4 at 'Thr-51' which is critical for the ability of PAGE4 to potentiate the transcriptional activator activity of JUN (PubMed:24559171).
Cellular Location	Nucleus. Cytoplasm. Nucleus speckle. Note=Predominantly nuclear Translocates from nucleus to cytoplasm in response to stress stimuli via SENP1-mediated desumoylation.
Tissue Location	Ubiquitously expressed with highest levels in skeletal muscle and heart. Overexpressed in breast cancer cell lines Isoform 2 is highly expressed in testis. Expressed in both androgen- dependent and androgen-independent prostate cancer cells (PubMed:28289210).

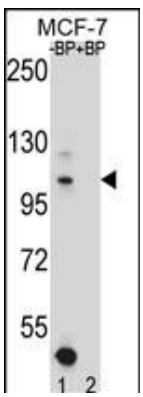
Background

The protein encoded by this gene belongs to the Ser/Thr family of protein kinases and HIPK subfamily. It phosphorylates homeodomain transcription factors and may also function as a co-repressor for homeodomain transcription factors. Alternative splicing results in four transcript variants encoding four distinct isoforms.

References

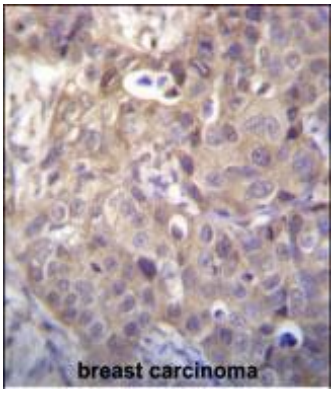
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Images



Western blot analysis of HIPK1 Antibody (C-term) Pab (Cat. #AP12465b) pre-incubated without(lane 1) and with(lane 2) blocking peptide in MCF-7 cell line lysate. HIPK1 Antibody (C-term) (arrow) was detected using the purified Pab.

HIPK1 Antibody (C-term) (Cat. #AP12465b)immunohistochemistry analysis in formalin



fixed and paraffin embedded human breast carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of HIPK1 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.

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