

HIPK1 Rabbit pAb

Catalog # AP98977

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	Q86Z02
Other Accession	Q86Z02
Reactivity	Rat, Human, Mouse
Predicted	Pig, Rabbit, Dog, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	130843
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human HIPK1
Epitope Specificity	1-100/1210
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the protein kinase superfamily. CMGC Ser/Thr protein kinase family. HIPK subfamily. Contains 1 protein kinase domain.
Post-translational modifications	Autophosphorylated. Phosphorylated and activated by JNK1.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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. [provided by RefSeq, Jul 2008]

Additional Information

Gene ID	204851
Other Names	Myak; Nbak2; 1110062K04Rik; HIPK1_HUMAN; HIPK1; Nuclear body-associated kinase 2; 2.7.11.1; KIAA0630; HIPK1_MOUSE; Protein kinase Myak; HIPK1_RAT; homeodomain interacting protein kinase 1
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.