

HIPK1 Polyclonal Antibody

Catalog # AP63896

Product Information

Application	WB
Primary Accession	Q86Z02
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	130843

Additional Information

Gene ID	204851
Other Names	Homeodomain-interacting protein kinase 1, 2.7.11.1, Nuclear body-associated kinase 2, HIPK1, KIAA0630, MYAK, NBAK2
Dilution	WB~~WB 1:500-2000 ELISA 1:5000-20000
Format	Liquid in PBS containing 50% glycerol, and 0.09% (W/V) sodium azide.
Storage Conditions	-20°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

SEN1-mediated desumoylation.

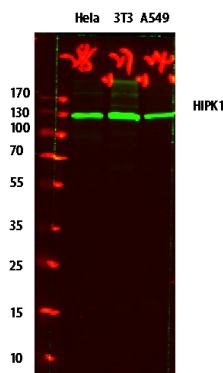
Tissue Location

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

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.

Images



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