

ARG66797 anti-HIPK1 antibody

Package: 100 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes HIPK1
Tested Reactivity	Hu, Ms
Predict Reactivity	Rat
Tested Application	WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	HIPK1
Species	Human
Immunogen	Synthetic peptide between aa. 290-370 of Human HIPK1.
Conjugation	Un-conjugated
Alternate Names	EC 2.7.11.1; Homeodomain-interacting protein kinase 1; Nuclear body-associated kinase 2; Myak; Nbak2

Application Instructions

Predict Reactivity Note	The immunogen sequence homology to rat HIPK1 protein is 100%.				
Application table	<table> <tr> <th>Application</th><th>Dilution</th></tr> <tr> <td>WB</td><td>1:500 - 1:2000</td></tr> </table>	Application	Dilution	WB	1:500 - 1:2000
Application	Dilution				
WB	1:500 - 1:2000				
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.				
Positive Control	HeLa, NIH/3T3 and A549				
Observed Size	~ 130 kDa				

Properties

Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	PBS, 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw

cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

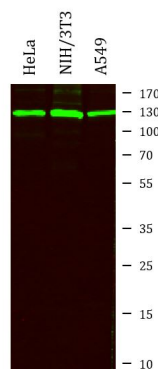
Note

For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	HIPK1
Gene Full Name	homeodomain interacting protein kinase 1
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. [provided by RefSeq, Jul 2008]
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). [UniProt]
Calculated Mw	131 kDa
PTM	Autophosphorylated. Phosphorylated and activated by JNK1. Degraded by PARK7 at the protein level. Sumoylated. When conjugated it is directed to nuclear speckles. SENP1-mediated desumoylation is mediated by TNF in response to stress stimuli, triggering transient translocation from nucleus to cytoplasm. [UniProt]
Cellular Localization	Nucleus. Cytoplasm. Note=Predominantly nuclear. Translocates from nucleus to cytoplasm in response to stress stimuli via SENP1-mediated desumoylation. [UniProt]

Images



ARG66797 anti-HIPK1 antibody WB image

Western blot: HeLa, NIH/3T3 and A549 cell lysates stained with ARG66797 anti-HIPK1 antibody at 1:1000 dilution, overnight at 4°C.