10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

HIPK1 Antibody (N-term) Blocking Peptide

Synthetic peptide
Catalog # BP7137a

Specification

HIPK1 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession	Q86Z02
Other Accession	NP_689909

HIPK1 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 204851

Other Names
Homeodomain-interacting protein kinase 1, Nuclear body-associated kinase 2, HIPK1, KIAA0630, MYAK, NBAK2

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP7137a was selected from the N-term region of human HIPK1. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

HIPK1 Antibody (N-term) Blocking Peptide - 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).

HIPK1 Antibody (N-term) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Blocking Peptides

HIPK1 Antibody (N-term) Blocking Peptide - Images

HIPK1 Antibody (N-term) Blocking Peptide - 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.