

## HIPK3 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP7540B

## Specification

# HIPK3 Antibody (C-term) - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Antigen Region WB, IHC-P,E <u>O9H422</u> <u>O88850</u>, <u>O9ERH7</u> Human, Mouse, Rat Mouse, Rat Rabbit Polyclonal Rabbit IgG 1127-1156

# HIPK3 Antibody (C-term) - Additional Information

## Gene ID 10114

### **Other Names**

Homeodomain-interacting protein kinase 3, Androgen receptor-interacting nuclear protein kinase, ANPK, Fas-interacting serine/threonine-protein kinase, FIST, Homolog of protein kinase YAK1, HIPK3, DYRK6, FIST3, PKY

#### Target/Specificity

This HIPK3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1127-1156 amino acids from the C-terminal region of human HIPK3.

**Dilution** WB~~1:1000 IHC-P~~1:25

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**

HIPK3 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

# HIPK3 Antibody (C-term) - Protein Information

## Name HIPK3



Synonyms DYRK6, FIST3, PKY

**Function** Serine/threonine-protein kinase involved in transcription regulation, apoptosis and steroidogenic gene expression. Phosphorylates JUN and RUNX2. Seems to negatively regulate apoptosis by promoting FADD phosphorylation. Enhances androgen receptor-mediated transcription. May act as a transcriptional corepressor for NK homeodomain transcription factors. The phosphorylation of NR5A1 activates SF1 leading to increased steroidogenic gene expression upon cAMP signaling pathway stimulation. In osteoblasts, supports transcription activation: phosphorylates RUNX2 that synergizes with SPEN/MINT to enhance FGFR2- mediated activation of the osteocalcin FGF-responsive element (OCFRE).

### Cellular Location Cytoplasm. Nucleus

## **Tissue Location**

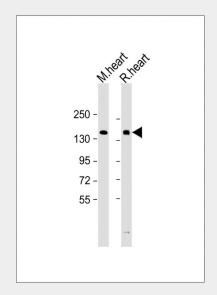
Overexpressed in multidrug resistant cells. Highly expressed in heart and skeletal muscle, and at lower levels in placenta, pancreas, brain, spleen, prostate, thymus, testis, small intestine, colon and leukocytes. Not found in liver and lung

# HIPK3 Antibody (C-term) - Protocols

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

- Western Blot
- <u>Blocking Peptides</u>
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

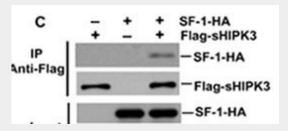
## HIPK3 Antibody (C-term) - Images



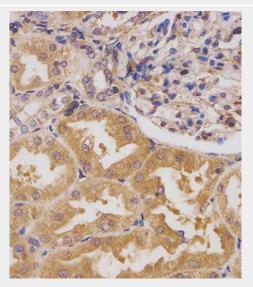
All lanes : Anti-HIPK3 Antibody (C-term) at 1:2000 dilution Lane 1: mouse heart lysate Lane 2: rat heart lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 134 kDa Blocking/Dilution buffer:



## 5% NFDM/TBST.



Detection of interaction between HIPK3 and SF-1 by coimmunoprecipitation. After expression of SF-1-HA and Flag-sHIPK3 (aa 159 to 1191) in H1299 cells, the HIPK3 protein complex was immunoprecipitated with anti-Flag antibody or by direct loading to the gel (input). Western blotting was then performed to detect SF-1-HA and Flag-sHIPK3.



AP7540b staining HIPK3 in human kidney tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0. 5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hours at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.

## HIPK3 Antibody (C-term) - Background

HIPK3 negatively regulates apoptosis by promoting FADD phosphorylation. This kinase enhances androgen receptor-mediated transcription, and may act as a transcriptional corepressor for NK homeodomain transcription factors.

## HIPK3 Antibody (C-term) - References

Blume-Jensen P, et al. Nature 2001. 411: 355. Cantrell D, J. Cell Sci. 2001. 114: 1439. Jhiang S Oncogene 2000. 19: 5590. Manning G, et al. Science 2002. 298: 1912. Moller, D, et al. Am. J. Physiol. 1994. 266: C351-C359. Robertson, S. et al. Trends Genet. 2000. 16: 368. Robinson D, et al. Oncogene 2000. 19: 5548. Van der Ven, P, et al. Hum. Molec. Genet. 1993. 2: 1889. Vanhaesebroeck, B, et al. Biochem. J. 2000. 346: 561. Van Weering D, et al. Recent Results Cancer Res. 1998. 154: 271. **HIPK3 Antibody (C-term) - Citations** 



- <u>Death-associated protein 6 (Daxx) mediates cAMP-dependent stimulation of Cyp11a1</u> (P450scc) transcription.
- <u>Tiefenbach J., et al. A live zebrafish-based screening system for human nuclear receptor ligand and cofactor discovery.PLoS One. 2010 Mar 22;5(3):e9797. doi:</u> <u>10.1371/journal.pone.0009797.</u>
- <u>Cyclic AMP stimulates SF-1-dependent CYP11A1 expression through</u> homeodomain-interacting protein kinase 3-mediated Jun N-terminal kinase and c-Jun phosphorylation.