

HOPX Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP11455b

Product Information

Application WB, FC, E **Primary Accession** Q9BPY8

Other Accession NP 001138931.1, NP 631957.1, NP 115884.4

Reactivity Human
Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Clone Names RB18900
Calculated MW 8260
Antigen Region 39-67

Additional Information

Gene ID 84525

Other Names Homeodomain-only protein, Lung cancer-associated Y protein, Not expressed

in choriocarcinoma protein 1, Odd homeobox protein 1, HOPX, HOD, HOP,

LAGY, NECC1, OB1

Target/Specificity This HOPX antibody is generated from rabbits immunized with a KLH

conjugated synthetic peptide between 39-67 amino acids from the C-terminal

region of human HOPX.

Dilution WB~~1:1000 FC~~1:10~50 E~~Use at an assay dependent concentration.

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 HOPX Antibody (C-term) is for research use only and not for use in diagnostic

or therapeutic procedures.

Protein Information

Name HOPX

Synonyms HOD, HOP, LAGY, NECC1, OB1

Function

Atypical homeodomain protein which does not bind DNA and is required to modulate cardiac growth and development. Acts via its interaction with SRF, thereby modulating the expression of SRF- dependent cardiac-specific genes and cardiac development. Prevents SRF- dependent transcription either by inhibiting SRF binding to DNA or by recruiting histone deacetylase (HDAC) proteins that prevent transcription by SRF. Overexpression causes cardiac hypertrophy (By similarity). May act as a tumor suppressor. Acts as a co-chaperone for HSPA1A and HSPA1B chaperone proteins and assists in chaperone-mediated protein refolding (PubMed: 27708256).

Cellular Location

Nucleus {ECO:0000250|UniProtKB:Q8R1H0}. Cytoplasm

{ECO:0000250 | UniProtKB:Q8R1H0}

Tissue Location

Widely expressed. Expressed in the heart, brain, placenta, lung, skeletal and smooth muscles, uterus, urinary bladder, kidney and spleen. Down-regulated in some types of cancer such as lung cancer, choriocarcinoma, head and neck squamous cell carcinoma and oral squamous cell carcinoma.

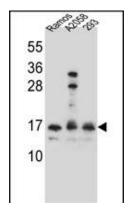
Background

The protein encoded by this gene is a homeodomain protein that lacks certain conserved residues required for DNA binding. It was reported that choriocarcinoma cell lines and tissues failed to express this gene, which suggested the possible involvement of this gene in malignant conversion of placental trophoblasts. Studies in mice suggest that this protein may interact with serum response factor (SRF) and modulate SRF-dependent cardiac-specific gene expression and cardiac development. Multiple alternatively spliced transcript variants have been identified for this gene. [provided by RefSeq].

References

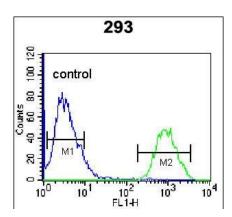
Yang, J.M., et al. Eur. J. Cell Biol. 89(7):537-546(2010) Ooki, A., et al. Oncogene 29(22):3263-3275(2010) Yamaguchi, S., et al. Int. J. Cancer 124(11):2577-2588(2009) Yamashita, K., et al. Mol. Cancer Res. 6(1):31-41(2008) De Toni, A., et al. Neural Dev 3, 13 (2008):

Images



HOPX Antibody (C-term) (Cat. #AP11455b) western blot analysis in Ramos,A2058,293 cell line lysates (35ug/lane). This demonstrates the HOPX antibody detected the HOPX protein (arrow).

HOPX Antibody (C-term) (Cat. #AP11455b) flow cytometric analysis of 293 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.



Citations

• <u>Downregulation of HOPX controls metastatic behavior in sarcoma cells and identifies genes associated with metastasis.</u>

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