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HOPX Rabbit pAb

Catalog # AP98015

Product Information

Application	IHC-P, IHC-F, IF, E
Primary Accession	Q9BPY8
Other Accession	Q9BPY8
Reactivity	Rat
Predicted	Pig, Human, Mouse, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	8260
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human HOPX
Epitope Specificity	21-73/73
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Contains 1 homeobox DNA-binding domain.
SUBUNIT	Interacts with serum response factor (SRF). Component of a large complex containing histone deacetylases such as HDAC2 (By similarity).
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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, Feb 2009]

Additional Information

Gene ID	84525
Other Names	HOP; LAGY; CAMEO; HOD; NECC1; OB1; SMAP31; TOTO; 1110018K11Rik; 1200015P04Rik; 2300002F06Rik; Hdop; Obl; GIIg15b; HOP_BOVIN; HOPX; Odd homeobox protein 1; HOP_HUMAN; Lung cancer-associated Y protein; Not expressed in choriocarcinoma protein 1; HOP_MOUSE; Homeobox-only protein; Odd homeobox protein 1 (mOB1); HOP_PIG; HOP_RAT; Global ischemia-induced gene 15B protein (GIIg15b); HOP homeobox; homeobox only domain
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA=1:5000-10000

Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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.

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