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

(Mouse) Hopx Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP21373c

Product Information

Application	WB, E
Primary Accession	Q8R1H0
Reactivity	Human, Rat, Mouse
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Clone Names	RB51159
Calculated MW	8282

Additional Information

Gene ID	74318
Other Names	Homeodomain-only protein, Homeobox-only protein, Odd homeobox protein 1, mOB1, Hopx, Hod, Hop, Ob1
Target/Specificity	This Mouse Hopx antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 22-54 amino acids from the Central region of Mouse Hopx.
Dilution	WB~~1:2000 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	(Mouse) Hopx Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	Hopx
Synonyms	Hod, Hop, 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 (PubMed:12297045, PubMed:12297046). Acts as a co-chaperone for HSPA1A and HSPA1B chaperone proteins and assists in chaperone-mediated protein refolding (By similarity).
Cellular Location	Nucleus. Cytoplasm. Note=According to PubMed:14516659 it is cytoplasmic.
Tissue Location	Expressed in the embryonic and adult heart and in the adult brain, liver, lung, skeletal muscle, intestine and spleen Throughout embryonic and postnatal development, it is expressed in the myocardium.

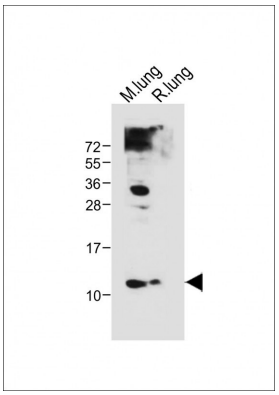
Background

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.

References

Chen F.,et al.Cell 110:713-723(2002).
Shin C.H.,et al.Cell 110:725-735(2002).
Adu J.,et al.Mech. Dev. 119:S43-S47(2002).
Carninci P.,et al.Science 309:1559-1563(2005).
Kook H.,et al.J. Clin. Invest. 112:863-871(2003).

Images



All lanes : Anti-(Mouse) Hopx Antibody (Center) at 1:1000 dilution Lane 1: Mouse lung tissue lysate Lane 2: Rat lung tissue lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 8 kDa Blocking/Dilution buffer: 5% NFDM/TBST.