

(Mouse) Hopx Blocking Peptide (Center)
Synthetic peptide
Catalog # BP21373c

Specification

(Mouse) Hopx Blocking Peptide (Center) - Product Information

Primary Accession [Q8R1H0](#)

(Mouse) Hopx Blocking Peptide (Center) - Additional Information

Gene ID 74318

Other Names

Homeodomain-only protein, Homeobox-only protein, Odd homeobox protein 1, mOB1, Hopx, Hod, Hop, Ob1

Target/Specificity

The synthetic peptide sequence is selected from aa 22-34 of HUMAN Hopx

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.

(Mouse) Hopx Blocking Peptide (Center) - 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.

(Mouse) Hopx Blocking Peptide (Center) - Protocols

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

- [Blocking Peptides](#)

(Mouse) Hopx Blocking Peptide (Center) - Images**(Mouse) Hopx Blocking Peptide (Center) - Background**

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(Mouse) Hopx Blocking Peptide (Center) - 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).