

MORC3 Blocking Peptide (Center) Synthetic peptide Catalog # BP20433c

### Specification

## **MORC3 Blocking Peptide (Center) - Product Information**

**Primary Accession** 

#### <u>Q14149</u>

### **MORC3 Blocking Peptide (Center) - Additional Information**

Gene ID 23515

**Other Names** MORC family CW-type zinc finger protein 3, Zinc finger CW-type coiled-coil domain protein 3, MORC3, KIAA0136, ZCWCC3

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.

# **MORC3 Blocking Peptide (Center) - Protein Information**

Name MORC3 (HGNC:23572)

Function

Nuclear matrix protein which forms MORC3-NBs (nuclear bodies) via an ATP-dependent mechanism and plays a role in innate immunity by restricting different viruses through modulation of the IFN response (PubMed:<a href="http://www.uniprot.org/citations/27440897" target=" blank">27440897</a>, PubMed:<a href="http://www.uniprot.org/citations/34759314" target=" blank">34759314</a>). Mechanistically, possesses a primary antiviral function through a MORC3-regulated element that activates IFNB1, and this function is guarded by a secondary IFNrepressing function (PubMed: <a href="http://www.uniprot.org/citations/34759314" target=" blank">34759314</a>). Sumoylated MORC3-NBs associates with PML-NBs and recruits TP53 and SP100, thus regulating TP53 activity (PubMed: <a href="http://www.uniprot.org/citations/17332504" target=" blank">17332504</a>, PubMed:<a href="http://www.uniprot.org/citations/20501696" target=" blank">20501696</a>). Binds RNA in vitro (PubMed: <a href="http://www.uniprot.org/citations/11927593" target=" blank">11927593</a>). Histone methylation reader which binds to non- methylated (H3K4me0), monomethylated (H3K4me1), dimethylated (H3K4me2) and trimethylated (H3K4me3) 'Lys-4' on histone H3 (PubMed:<a href="http://www.uniprot.org/citations/26933034" target=" blank">26933034</a>). The order of binding preference is H3K4me3 > H3K4me2 > H3K4me1 > H3K4me0 (PubMed:<a href="http://www.uniprot.org/citations/26933034"



target="\_blank">26933034</a>).

Cellular Location Nucleus, nucleoplasm. Nucleus matrix Nucleus, PML body. Chromosome {ECO:0000250|UniProtKB:F7BJB9}. Note=Also found in PML-independent nuclear bodies. Localization to nuclear bodies is ATP-dependent

**Tissue Location** Expressed in heart, placenta, skeletal muscle, brain, pancreas, lung, liver, but not kidney

# **MORC3 Blocking Peptide (Center) - Protocols**

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

• <u>Blocking Peptides</u> MORC3 Blocking Peptide (Center) - Images

#### MORC3 Blocking Peptide (Center) - Background

This gene encodes a protein that localizes to the nuclear matrix. The protein also has RNA binding activity, and has a predicted coiled coil domain.

### **MORC3 Blocking Peptide (Center) - References**

Nagase T., et al. DNA Res. 2:167-174(1995). Ota T., et al. Nat. Genet. 36:40-45(2004). Hattori M., et al. Nature 405:311-319(2000). Burkard T.R., et al. BMC Syst. Biol. 5:17-17(2011).