

**MORC3 Antibody (Center)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP20433c**

**Specification**

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**MORC3 Antibody (Center) - Product Information**

Application	<b>WB, IHC-P,E</b>
Primary Accession	<a href="#">O14149</a>
Reactivity	<b>Human</b>
Host	<b>Rabbit</b>
Clonality	<b>Polyclonal</b>
Isotype	<b>Rabbit IgG</b>
Antigen Region	<b>634-663</b>

**MORC3 Antibody (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

**Target/Specificity**

This MORC3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 634-663 amino acids from the Central region of human MORC3.

**Dilution**

WB~~1:1000  
IHC-P~~1:100

**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**

MORC3 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

**MORC3 Antibody (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:[27440897](#), PubMed:[34759314](#)). Mechanistically, possesses a primary antiviral function through a MORC3-regulated element that activates IFNB1, and this function is guarded by a secondary IFN- repressing function (PubMed:[34759314](#)). Sumoylated MORC3-NBs associates with PML-NBs and recruits TP53 and SP100, thus regulating TP53 activity (PubMed:[17332504](#), PubMed:[20501696](#)). Binds RNA in vitro (PubMed:[11927593](#)). Histone methylation reader which binds to non- methylated (H3K4me0), monomethylated (H3K4me1), dimethylated (H3K4me2) and trimethylated (H3K4me3) 'Lys-4' on histone H3 (PubMed:[26933034](#)). The order of binding preference is H3K4me3 > H3K4me2 > H3K4me1 > H3K4me0 (PubMed:[26933034](#)).

#### 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

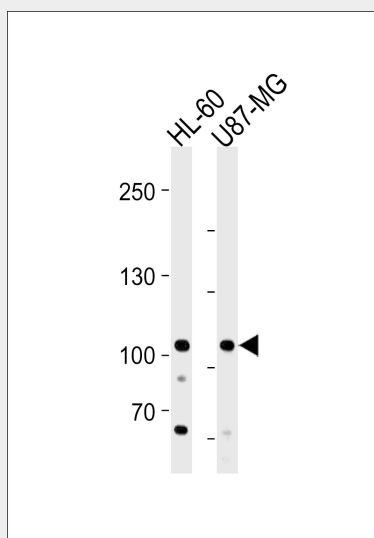
Expressed in heart, placenta, skeletal muscle, brain, pancreas, lung, liver, but not kidney

### MORC3 Antibody (Center) - Protocols

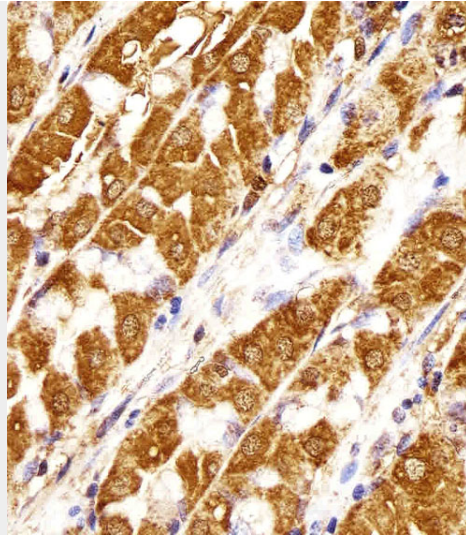
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

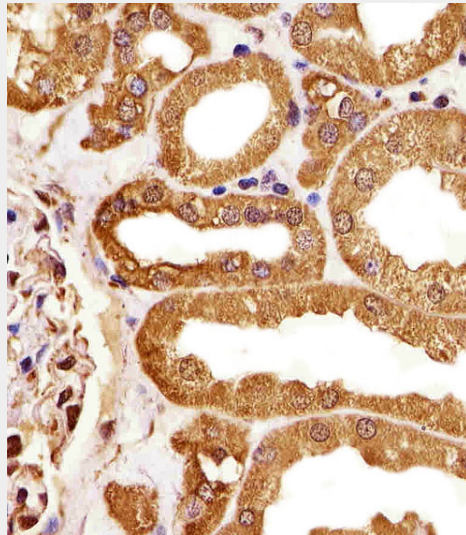
### MORC3 Antibody (Center) - Images



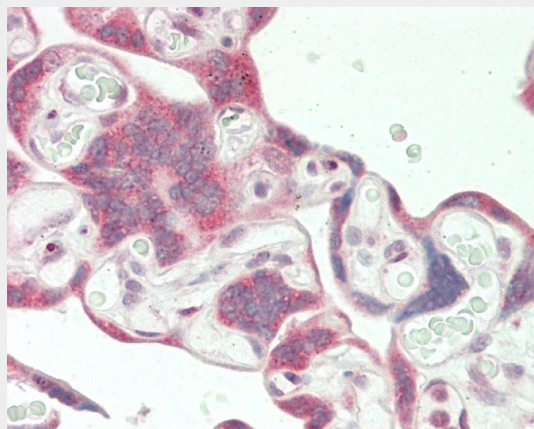
MORC3 Antibody (Center) (Cat. #AP20433c) western blot analysis in HL-60 and U87-MG cell line lysates (35ug/lane). This demonstrates the MORC3 antibody detected the MORC3 protein (arrow).



Immunohistochemical analysis of paraffin-embedded H. stomach section using MORC3 Antibody (Center)(Cat#AP20433c). AP20433c was diluted at 1:25 dilution. A undiluted biotinylated goat polyvalent antibody was used as the secondary, followed by DAB staining.



Immunohistochemical analysis of paraffin-embedded H. kidney section using MORC3 Antibody (Center)(Cat#AP20433c). AP20433c was diluted at 1:25 dilution. A undiluted biotinylated goat polyvalent antibody was used as the secondary, followed by DAB staining.



Formalin-fixed and paraffin-embedded H.placenta tissue reacted with MORC3 Antibody (Center)

(Cat#AP20433c).

### **MORC3 Antibody (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 Antibody (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).