

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

Specification

MORC3 Antibody (Center) - Product Information

Application	IHC-P, WB,E
Primary Accession	Q14149
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	634-663

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

IHC-P~~1:100

WB~~1:1000

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

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

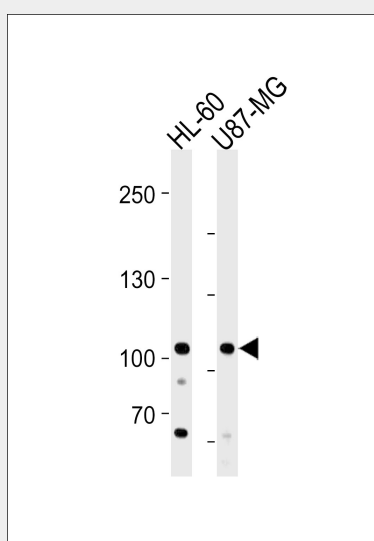
Expressed in heart, placenta, skeletal muscle, brain, pancreas, lung, liver, but not kidney

MORC3 Antibody (Center) - Protocols

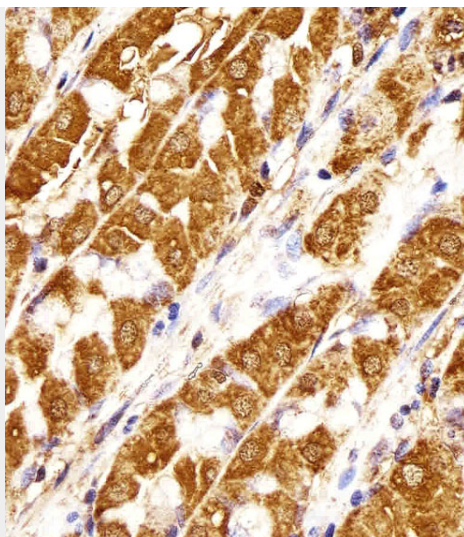
Provided below are standard protocols that you may find useful for product applications.

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

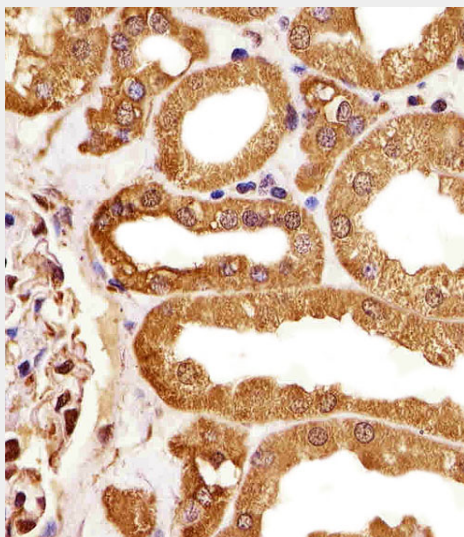
MORC3 Antibody (Center) - Images



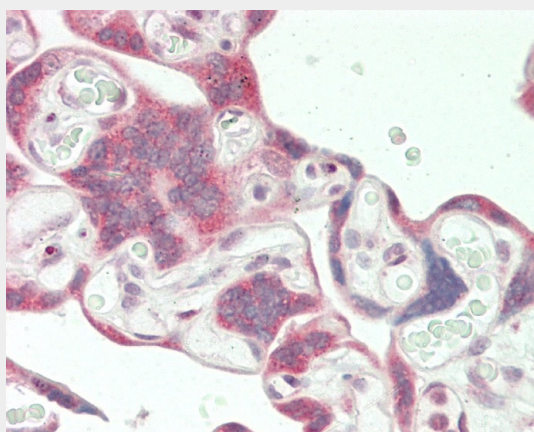
MORC3 Antibody (Center) (Cat. #AP20433c) western blot analysis in HL-60 and U87-MG cell line lysates (35ug/lane). This demonstrates the MORC3 antibody detected the MORC3 protein (arrow).



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).