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MORC3 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP20433c

Product Information

Application	WB, IHC-P, E
Primary Accession	Q14149
Reactivity	Human
Predicted	Bovine, Canine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	107113
Antigen Region	634-663

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 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.

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

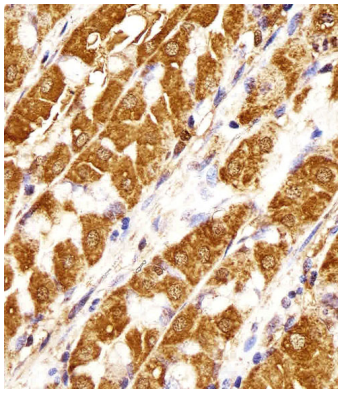
Background

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.

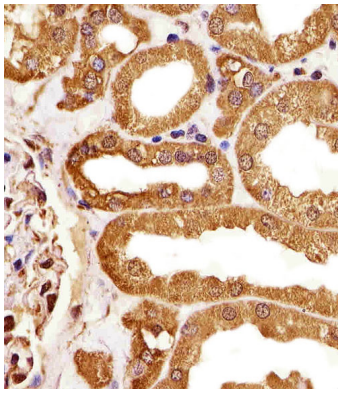
References

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).

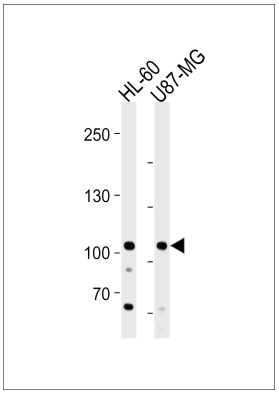
Images



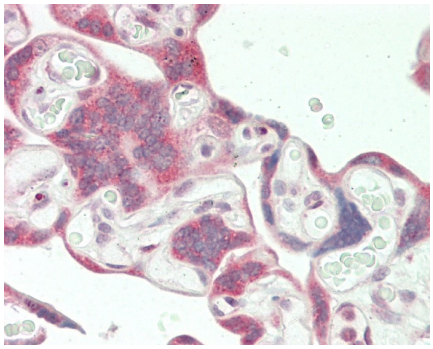
Immunohistochemical analysis of paraffin-embedded H. stomach section using MORC3 Antibody (Center)(Cat#AP20433c). AP20433c was diluted at 1:25 dilution. A undiluted biotinylated goat polyvalent antibody was used as the secondary, followed by DAB staining.



Immunohistochemical analysis of paraffin-embedded H. kideny 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.



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).



Formalin-fixed and paraffin-embedded H.placenta tissue reacted with MORC3 Antibody (Center) (Cat#AP20433c).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.