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Anti-Morc3 (RABBIT) Antibody

Morc3 Antibody
Catalog # ASR3767

Specification

Anti-Morc3 (RABBIT) Antibody - Product Information

Host	**Rabbit**
Conjugate	**Unconjugated**
Target Species	**Human**
Reactivity	**Human, Mouse**
Clonality	**Polyclonal**
Application	**WB, E, I, LCI**
Application Note	**Anti-Morc3 Antibody is tested for use in Western Blot and suitable for ChIP and IF. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 107.1 kDa in size corresponding Morc3 by western blotting in the appropriate cell lysate or extract.**
Physical State	**Liquid (sterile filtered)**
Buffer	**0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2**
Immunogen	**Morc3 whole rabbit serum was prepared by repeated immunizations with a human Morc3 recombinant protein.**
Preservative	**0.01% (w/v) Sodium Azide**

Anti-Morc3 (RABBIT) Antibody - Additional Information

Gene ID 23515

Other Names
23515

Purity
Morc3 antibody was prepared from monospecific antiserum by delipidation and defibrination. The antibody is specific for human Morc3 in expressed cell lysates. Cross reactivity is seen in mouse Morc3. Cross reactivity to other Morc proteins has not been determined.

Storage Condition
Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Precautions Note
This product is for research use only and is not intended for therapeutic or diagnostic applications.

Anti-Morc3 (RABBIT) Antibody - 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

Anti-Morc3 (RABBIT) Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-Morc3 (RABBIT) Antibody - Images

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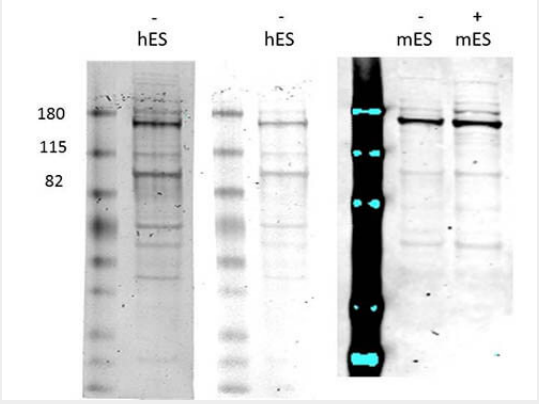

Western Blot of Rabbit anti-Morc3 antibody. Lane 1: Human embryonic stem cell. Lane 2: Human embryonic stem cell. Lane 3: C-Flag Mouse embryonic stem cell. Lane 4: C-Flag Mouse embryonic stem cell doxycycline induced. Load: 35 µg per lane. Primary antibody: hMorc3 antibody at 1:1000-1:5000 for overnight at 4°C. Secondary antibody: IRDye800™ rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 107kDa/ ~170kDa. Other band(s): sumoylated Morc run higher.

Anti-Morc3 (RABBIT) Antibody - Background

The Morc (microrchidia) family of proteins are ATPases of the GHKL family. They have been implicated in transcriptional repression of genes and transposons, and higher order organization of DNA within the nucleus. Morc antibodies are ideal for researchers interested in Epigenetics, Cancer, and Cell cycle research.