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Product datasheet for AM26535AF-N

MORC3 Mouse Monoclonal Antibody [Clone ID: 17A9]

Product data:

Product Type:	Primary Antibodies
Clone Name:	17A9
Applications:	IF, WB
Recommended Dilution:	**Western blot:** 1-5 µg/ml for chemiluminescence detection system. For details see protocol below. **Immunocytochemistry:** 5 µg/ml (see Ref 1 and 4) **Immunoprecipitation:** (see Ref. 3)
Reactivity:	Human, Mouse, Rat
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Recombinant human MORC3
Specificity:	This antibody detects MORC3.
Formulation:	PBS containing 50% glycerol, pH 7.2. No preservative is contained. State: Azide Free State: Liquid Ig fraction
Concentration:	lot specific
Purification:	Protein A agarose
Conjugation:	Unconjugated
Storage:	Upon receipt, store (in aliqouts) at -20 °C. Avoid repeated freezing and thawing.
Stability:	Shelf life: One year from despatch.
Gene Name:	MORC family CW-type zinc finger 3
Database Link:	Entrez Gene 23515 Human Q14149

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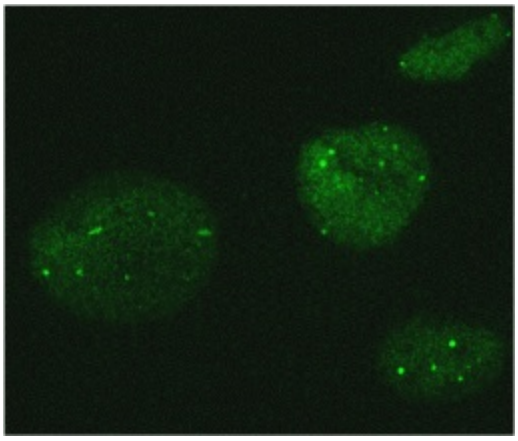
Background: MORC3 { m icr orc hidia (MORC) family CW-type zinc finger 3 , KIAA0136, ZCWCC3 and NXP-2}, is a member of the MORC protein family characterized by the conser ved domains consisting of a GHL (Gyrase B, Hsp90 and MutL)-ATPase domain at the N-terminus, a zinc finger type CW domain containing conserved four cysteines and two tryptophans, a nuclear localization signal (NLS) and coiled-coil domains at the C-terminus. There are four MORC family proteins (MORC1, MORC2, MORC3, and MORC4) in human and five (Morc1, Morc2a, Morc2b, Morc3, and Morc4) in mice. MORC1 is expressed specifically in male germ cells, whereas MORC2 and MORC3 in human are ubiquitously expressed. The autosomal recessive mutation of Morc1 in mice causes the arrest of spermatogenesis early in prophase I of meiosis. Takahashi et al . reported that MORC3 is involved in p53 activation and localization of conditionally localized p53 and constitutively localized Sp100 to promyelocytic leukemia (PML)-nuclear bodies (NBs) through its GHL-ATPase activity. MORC3 is localized in PML-nuclear bodies and entire nucleoplasm except for nucleoli.

Synonyms: MORC family CW-type zinc finger protein 3, KIAA0136, ZCWCC3

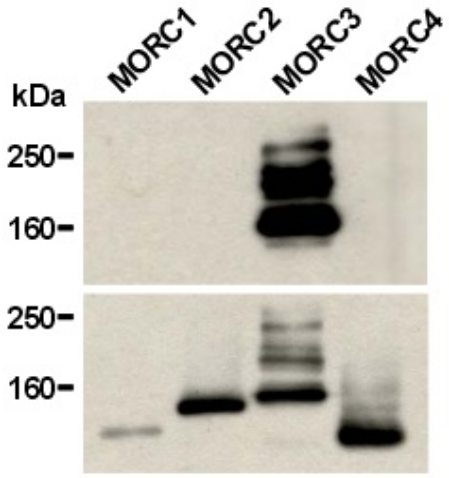
Note: This product was originally produced by MBL International.

Protocol:
SDS-PAGE & Western Blotting
1) Wash the 1x10e7 cells 3 times with PBS and suspend with 1 mL of Laemmli's sample buffer.
2) Boil the samples for 2 minutes and centrifuge. Load 20 µ L of the sample per lane in a 1 mm thick SDS-polyacrylamide gel for electrophoresis.
3) Blot the protein to a polyvinylidene difluoride (PVDF) membrane at 1 mA/cm 2 for 1 hour in a semi-dry transfer system (Transfer Buffer: 25 mM Tris, 190 mM glycine, 20% MeOH). See the manufacture's manual for precise transfer procedure.
4) To reduce nonspecific binding, soak the membrane in 10% skimmed milk (in PBS, pH 7.2) for 1 hour at room temperature, or overnight at 4 o C.
5) Incubate the membrane with primary antibody diluted with PBS, pH 7.2 containing 1% skimmed milk as suggest in the APPLICATIONS for 1 hour at room temperature. (The concentration of antibody will depend on condition.)
6) Wash the membrane with PBS-T [0.05% Tween-20 in PBS] (5 minutes x 3 times).
7) Incubate the membrane with the 1:10,000 HRP-conjugated anti-mouse IgG diluted with 1% skimmed milk (in PBS, pH 7.2) for 1 hour at room temperature.
8) Wash the membrane with PBS-T (5 minutes x 3 times).
9) Wipe excess buffer on the membrane, then incubate it with appropriate chemiluminescence reagent for 1 minute. Remove extra reagent from the membrane by dabbing with paper towel, and seal it in plastic wrap.
10) Expose to an X-ray film in a dark room for 3 minutes. Develop the film as usual. The condition for exposure and development may vary.
(Positive controls for Western blotting; HL60, U937, A431, WR19L, NIH/3T3, MEF, Rat1, PC12)

Product images:



Immunocytochemical detection of MORC3 on 4% PFA fixed Saos2 cells with AM26535AF-N. This data was kindly provided by Dr. Norimitsu Inoue. (Department of Molecular Genetics, Osaka Medical Center for Cancer and Cardiovascular Diseases, Osaka, Osaka 537-8511, Japan)



Western blot analysis of MORC3 expression in transfectant of MORC protein families using AM26535AF-N (upper panel) or anti-DDDDK-tag (lower panel). Expression plasmids of MORC protein families were kindly provided by Dr. Norimitsu Inoue. (Department of Molecular Genetics, Osaka Medical Center for Cancer and Cardiovascular Diseases, Osaka, Osaka 537-8511, Japan)