

MORF4L1 Antibody (C-Term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP21879b

Product Information

| Application | WB, E |
|-------------------|-------------------------------|
| Primary Accession | <u>Q9UBU8</u> |
| Other Accession | <u>P60762, Q5NVP9, Q6AYU1</u> |
| Reactivity | Human, Rat, Mouse |
| Predicted | Mouse, Rat |
| Host | Rabbit |
| Clonality | polyclonal |
| Isotype | Rabbit IgG |
| Clone Names | RB54237 |
| Calculated MW | 41474 |

Additional Information

| Gene ID | 10933 |
|--------------------|--|
| Other Names | Mortality factor 4-like protein 1, MORF-related gene 15 protein, Protein MSL3-1, Transcription factor-like protein MRG15, MORF4L1, MRG15 |
| Target/Specificity | This MORF4L1 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 328-360 amino acids from human MORF4L1. |
| Dilution | WB~~1:2000 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 | MORF4L1 Antibody (C-Term) is for research use only and not for use in diagnostic or therapeutic procedures. |

Protein Information

| Name | MORF4L1 (<u>HGNC:16989</u>) |
|----------|---|
| Function | Component of the NuA4 histone acetyltransferase (HAT) complex which is involved in transcriptional activation of select genes principally by acetylation of nucleosomal histones H4 and H2A. This modification may both alter |

nucleosome - DNA interactions and promote interaction of the modified histones with other proteins which positively regulate transcription. This complex may be required for the activation of transcriptional programs associated with oncogene and proto-oncogene mediated growth induction, tumor suppressor mediated growth arrest and replicative senescence, apoptosis, and DNA repair. The NuA4 complex ATPase and helicase activities seem to be, at least in part, contributed by the association of RUVBL1 and RUVBL2 with EP400. NuA4 may also play a direct role in DNA repair when directly recruited to sites of DNA damage. As part of the SIN3B complex represses transcription and counteracts the histone acetyltransferase activity of EP300 through the recognition H3K27ac marks by PHF12 and the activity of the histone deacetylase HDAC2 (PubMed: 12391155, PubMed: 14966270, PubMed:37137925). SIN3B complex is recruited downstream of the constitutively active genes transcriptional start sites through interaction with histones and mitigates histone acetylation and RNA polymerase II progression within transcribed regions contributing to the regulation of transcription (PubMed:21041482). Required for homologous recombination repair (HRR) and resistance to mitomycin C (MMC). Involved in the localization of PALB2, BRCA2 and RAD51, but not BRCA1, to DNA-damage foci.

Cellular Location

Nucleus.

Background

Component of the NuA4 histone acetyltransferase (HAT) complex which is involved in transcriptional activation of select genes principally by acetylation of nucleosomal histones H4 and H2A. This modification may both alter nucleosome - DNA interactions and promote interaction of the modified histones with other proteins which positively regulate transcription. This complex may be required for the activation of transcriptional programs associated with oncogene and proto-oncogene mediated growth induction, tumor suppressor mediated growth arrest and replicative senescence, apoptosis, and DNA repair. The NuA4 complex ATPase and helicase activities seem to be, at least in part, contributed by the association of RUVBL1 and RUVBL2 with EP400. NuA4 may also play a direct role in DNA repair when directly recruited to sites of DNA damage. Also component of the mSin3A complex which acts to repress transcription by deacetylation of nucleosomal histones. Required for homologous recombination repair (HRR) and resistance to mitomycin C (MMC). Involved in the localization of PALB2, BRCA2 and RAD51, but not BRCA1, to DNA-damage foci.

References

Bertram M.J.,et al.Mol. Cell. Biol. 19:1479-1485(1999). D'Esposito M.,et al.Submitted (JUL-1999) to the EMBL/GenBank/DDBJ databases. Wan D.,et al.Proc. Natl. Acad. Sci. U.S.A. 101:15724-15729(2004). Guo S.,et al.Submitted (SEP-2002) to the EMBL/GenBank/DDBJ databases. Zhang Q.-H.,et al.Genome Res. 10:1546-1560(2000).

Images

All lanes : Anti-MORF4L1 Antibody (C-Term) at 1:2000 dilution Lane 1: A549 whole cell lysate Lane 2: Hela whole cell lysate Lane 3: Jurkat whole cell lysate Lane 4: K562 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 41 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



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