

MCM9 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP20295b

Product Information

Application WB, E **Primary Accession** Q9NXL9 **Other Accession F1N2W9** Reactivity Human **Predicted** Bovine Host Rabbit Clonality Polyclonal Isotype Rabbit IgG **Clone Names** RB32018 **Calculated MW** 127313 **Antigen Region** 316-345

Additional Information

Gene ID 254394

Other Names DNA helicase MCM9, hMCM9, Mini-chromosome maintenance deficient

domain-containing protein 1, Minichromosome maintenance 9, MCM9,

C6orf61, MCMDC1

Target/Specificity This MCM9 antibody is generated from rabbits immunized with a KLH

conjugated synthetic peptide between 316-345 amino acids from the

C-terminal region of human MCM9.

Dilution 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 MCM9 Antibody (C-term) is for research use only and not for use in diagnostic

or therapeutic procedures.

Protein Information

Name MCM9

Synonyms C6orf61, MCMDC1

Function

Component of the MCM8-MCM9 complex, a complex involved in the repair of double-stranded DNA breaks (DBSs) and DNA interstrand cross- links (ICLs) by homologous recombination (HR) (PubMed:23401855). Required for DNA resection by the MRE11-RAD50-NBN/NBS1 (MRN) complex by recruiting the MRN complex to the repair site and by promoting the complex nuclease activity (PubMed:26215093). Probably by regulating the localization of the MRN complex, indirectly regulates the recruitment of downstream effector RAD51 to DNA damage sites including DBSs and ICLs (PubMed:23401855). Acts as a helicase in DNA mismatch repair (MMR) following DNA replication errors to unwind the mismatch containing DNA strand (PubMed:26300262). In addition, recruits MLH1, a component of the MMR complex, to chromatin (PubMed:26300262). The MCM8-MCM9 complex is dispensable for DNA replication and S phase progression (PubMed:23401855). Probably by regulating HR, plays a key role during gametogenesis (By similarity).

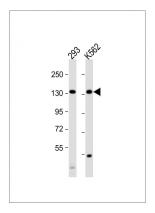
Cellular Location

Nucleus. Chromosome. Note=Colocalizes to nuclear foci with RPA1 following DNA damage (PubMed:23401855). Localizes to double- stranded DNA breaks (PubMed:23401855). Recruited to chromatin by MSH2 (PubMed:26300262).

Background

MCM9, a member of the MCM2-8 family, binds to chromatin and is required for the recruitment of the MCM2-7 helicase onto chromatin. MCM9 can form a complex with Cdt1. It is thought that MCM9 might play an important role in DNA replication since its depletion results in its inhibition.

Images



All lanes: Anti-MCM9 Antibody (C-term) at 1:1000 dilution Lane 1: 293 whole cell lysate Lane 2: 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: 127 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

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