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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, Mouse, Rat, Canine, Rabbit, Chicken
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

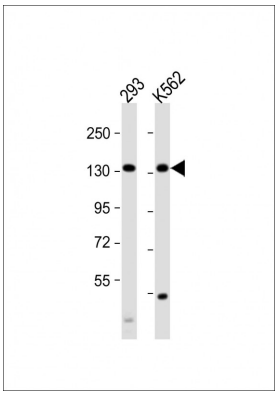
Name	MCM9
Synonyms	C6orf61, MCMDC1

Function	Component of the MCM8-MCM9 complex, which is involved in the repair of double-stranded DNA breaks (DBSs) and DNA interstrand cross- links (ICLs) by homologous recombination (HR) (PubMed:23401855). The MCM8-MCM9 complex is a 3'-5' DNA helicase and single-stranded (ss)DNA- stimulated ATPase which binds ssDNA in the presence of nucleoside triphosphates (PubMed:37309874). 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). Indirectly regulates the recruitment of downstream effector RAD51 to DNA damage sites including DBSs and ICLs, probably by regulating the localization of the MNR complex (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). Plays a key role during gametogenesis, probably by regulating HR (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'.