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MCM8 antibody - N-terminal region

Rabbit Polyclonal Antibody
Catalog # AI11020

Product Information

Application	WB
Primary Accession	Q9UJA3
Other Accession	NM_032485, NP_115874
Reactivity	Human, Mouse, Rat, Rabbit, Zebrafish, Dog, Horse, Bovine
Predicted	Human, Mouse, Rat, Rabbit, Pig, Chicken, Dog, Horse, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	93697

Additional Information

Gene ID	84515
Alias Symbol	C20orf154, MGC119522, MGC119523, MGC12866, MGC4816, REC, dJ967N21.5
Other Names	DNA helicase MCM8, 3.6.4.12, Minichromosome maintenance 8, MCM8, C20orf154
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-MCM8 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	MCM8 antibody - N-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	MCM8
Synonyms	C20orf154
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). The MCM8-MCM9 complex is dispensable for DNA replication and S phase progression (PubMed:23401855). May play a non-essential for DNA replication: may be involved in the activation of the prereplicative complex (pre-RC) during G(1) phase by recruiting CDC6 to the origin recognition complex (ORC) (PubMed:15684404). Facilitates somatic mitochondrial (mt)DNA recombination (PubMed:36355348). Plays a key role during gametogenesis, probably by regulating HR (By similarity). Stabilizes MCM9 protein (PubMed:23401855, PubMed:26215093).

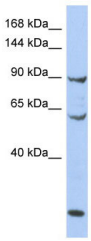
Cellular Location

Nucleus. Chromosome. Cytoplasm. Mitochondrion matrix. Note=Localizes to nuclear foci (PubMed:26215093). Localizes to double-stranded DNA breaks (PubMed:23401855). Binds chromatin throughout the cell cycle (PubMed:15684404). Colocalizes with mitochondrial DNA (PubMed:36355348).

Tissue Location

Highest levels in placenta, lung and pancreas. Low levels in skeletal muscle and kidney. Expressed in various tumors with highest levels in colon and lung cancers

Images



WB Suggested Anti-MCM8 Antibody Titration: 0.2-1 µg/ml
ELISA Titer: 1:1562500
Positive Control: OVCAR-3 cell lysate

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