

MCM8 Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP17408c**Specification**

MCM8 Antibody (Center) Blocking Peptide - Product InformationPrimary Accession [Q9UJA3](#)**MCM8 Antibody (Center) Blocking Peptide - Additional Information****Gene ID** 84515**Other Names**

DNA helicase MCM8, Minichromosome maintenance 8, MCM8, C20orf154

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

MCM8 Antibody (Center) Blocking Peptide - Protein Information**Name** MCM8**Synonyms** C20orf154**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 MNR complex, indirectly regulates the recruitment of downstream effector RAD51 to DNA damage sites including DBSs and ICLs (PubMed:23401855). The MCM8-MCM9 complex is dispensable for DNA replication and S phase progression (PubMed:23401855). However, 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). Probably by regulating HR, plays a key role during gametogenesis (By similarity). Stabilizes MCM9 protein (PubMed:23401855, PubMed:26215093).

Cellular Location

Nucleus. Chromosome. Note=Localizes to nuclear foci (PubMed:26215093). Localizes to double-stranded DNA breaks (PubMed:23401855). Binds chromatin throughout the cell cycle (PubMed:15684404).

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

MCM8 Antibody (Center) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

MCM8 Antibody (Center) Blocking Peptide - Images**MCM8 Antibody (Center) Blocking Peptide - Background**

The protein encoded by this gene is one of the highly conserved mini-chromosome maintenance proteins (MCM) that are essential for the initiation of eukaryotic genome replication. The hexameric protein complex formed by the MCM proteins is a key component of the pre-replication complex (pre-RC) and may be involved in the formation of replication forks and in the recruitment of other DNA replication related proteins. This protein contains the central domain that is conserved among the MCM proteins. This protein has been shown to co-immunoprecipitate with MCM4, 6 and 7, which suggests that it may interact with other MCM proteins and play a role in DNA replication. Alternatively spliced transcript variants encoding distinct isoforms have been described.

MCM8 Antibody (Center) Blocking Peptide - References

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010) Pelak, K., et al. J. Infect. Dis. 201(8):1141-1149(2010) Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009) He, C., et al. Nat. Genet. 41(6):724-728(2009) Stolk, L., et al. Nat. Genet. 41(6):645-647(2009)