

# MCM8 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP17408c

# **Specification**

# MCM8 Antibody (Center) - Product Information

Application WB,E
Primary Accession Q9UJA3

Other Accession <u>NP\_115874.3</u>, <u>NP\_877954.1</u>

Reactivity
Human
Host
Clonality
Polyclonal
Isotype
Calculated MW
Antigen Region

Human
Rabbit
Polyclonal
Rabbit IgG
322-350

### MCM8 Antibody (Center) - Additional Information

#### **Gene ID 84515**

#### **Other Names**

DNA helicase MCM8, Minichromosome maintenance 8, MCM8, C20orf154

### Target/Specificity

This MCM8 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 322-350 amino acids from the Central region of human MCM8.

### **Dilution**

WB~~1:1000

## **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**

MCM8 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

# MCM8 Antibody (Center) - 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**

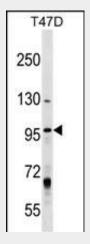
Highest levels in placenta, lung and pancreas. Low levels in skeletal muscle and kidney. Expressed in various tumors with highest levels in colon and lung cancers

# MCM8 Antibody (Center) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

#### MCM8 Antibody (Center) - Images



MCM8 Antibody (Center) (Cat. #AP17408c) western blot analysis in T47D cell line lysates (35ug/lane). This demonstrates the MCM8 antibody detected the MCM8 protein (arrow).



## MCM8 Antibody (Center) - 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) - 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)