

Product name:	MCM6 Rabbit Polyclonal Antibody
Cat number:	ABN13725
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	The antiserum was produced against synthesized peptide derived from the Internal region of human MCM6. AA range:331-380
Reactivity:	Human,Mouse,Rat
Applications:	WB 1:500-1:2000,IHC 1:50-1:300
Molecular Weight:	90kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

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. The MCM complex consisting of this protein and MCM2, 4 and 7 proteins possesses DNA helicase activity, and may act as a DNA unwinding enzyme. The phosphorylation of the complex by CDC2 kinase reduces the helicase activity, suggesting a role in the regulation of DNA replication. Single nucleotide polymorphisms in the intron regions of this gene are associated with differential transcriptional activation of the promoter of the neighboring lactase gene and, thereby, ifunction:May be involved in the control of a single round of DNA replication during S phase. Binds to chromatin during G1 and detach from it during S phase as if it licenses the chromatin to replicate.,polymorphism:Intronic variations in MCM6 upstream from the LCT gene are associated with adult-type hypolactasia [MIM:223100] leading to lactose intolerance, or with lactase persistence. Lactose intolerance is a normal physiological phenomenon caused by developmental down-regulation of lactase activity during childhood or early adulthood. A non-coding variation in MCM6 affects the transcriptional regulation of the LCT gene resulting in down-regulation of lactase activity. However the majority of Northern Europeans and some African populations have the ability to maintain lactase activity and digest lactose throughout life (lactase persistence).,PTM:Phosphorylated upon DNA damage, probably by ATM or ATR.,similarity:Belongs to the MCM family.,similarity:Contains 1 MCM domain.,subunit:May interact with MCM10. Interacts with TIPIN.,