

## ARG66941 anti-MCM2 antibody [SQab22271]

Package: 100 µl, 50 µl  
Store at: -20°C

### Summary

Product Description	Recombinant Rabbit Monoclonal antibody [SQab22271] recognizes MCM2
Tested Reactivity	Hu, Rat
Tested Application	IHC-P, WB
Host	Rabbit
Clonality	Monoclonal
Clone	SQab22271
Isotype	IgG
Target Name	MCM2
Species	Human
Immunogen	Full length protein corresponding to Human MCM2.
Conjugation	Un-conjugated
Alternate Names	CCNL1; Nuclear protein BM28; BM28; DNA replication licensing factor MCM2; cdc19; Minichromosome maintenance protein 2 homolog; MITOTIN; CDCL1; D3S3194; EC 3.6.4.12

### Application Instructions

Application table	Application	Dilution
	IHC-P	1:100 - 1:200
	WB	1:500 - 1:2000
Application Note	IHC-P: Antigen Retrieval: Heat mediated was performed using Tris/EDTA buffer (pH 9.0). Incubate the samples at RT (18-25°C) for 30 min. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	Human tonsil	
Observed Size	125 kDa	

### Properties

Form	Liquid
Purification	Purification with Protein A.
Buffer	PBS, 0.01% Sodium azide, 40% Glycerol and 0.05%BSA.
Preservative	0.01% Sodium azide
Stabilizer	40% Glycerol and 0.05%BSA
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated

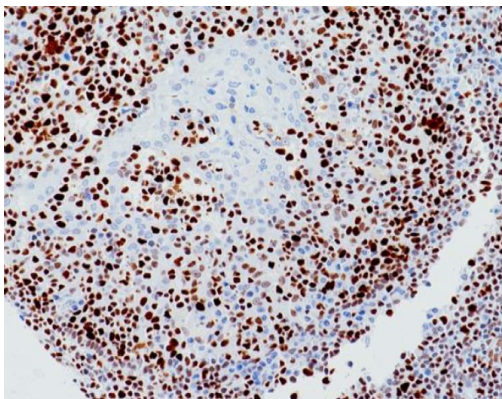
freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

**Note** For laboratory research only, not for drug, diagnostic or other use.

## Bioinformation

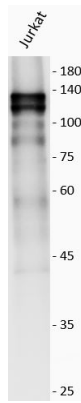
Gene Symbol	MCM2
Gene Full Name	minichromosome maintenance complex component 2
Background	The protein encoded by this gene is one of the highly conserved mini-chromosome maintenance proteins (MCM) that are involved in the initiation of eukaryotic genome replication. The hexameric protein complex formed by 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 forms a complex with MCM4, 6, and 7, and has been shown to regulate the helicase activity of the complex. This protein is phosphorylated, and thus regulated by, protein kinases CDC2 and CDC7. Multiple alternatively spliced transcript variants have been found, but the full-length nature of some variants has not been defined. [provided by RefSeq, Oct 2012]
Function	Acts as component of the MCM2-7 complex (MCM complex) which is the putative replicative helicase essential for 'once per cell cycle' DNA replication initiation and elongation in eukaryotic cells. The active ATPase sites in the MCM2-7 ring are formed through the interaction surfaces of two neighboring subunits such that a critical structure of a conserved arginine finger motif is provided in trans relative to the ATP-binding site of the Walker A box of the adjacent subunit. The six ATPase active sites, however, are likely to contribute differentially to the complex helicase activity. Required for the entry in S phase and for cell division. [UniProt]
Calculated Mw	102 kDa
PTM	Phosphorylated on Ser-108 by ATR in proliferating cells. Ser-108 proliferation is increased by genotoxic agents. Ser-40 is mediated by the CDC7-DBF4 and CDC7-DBF4B complexes, while Ser-53 phosphorylation is only mediated by the CDC7-DBF4 complex. Phosphorylation by the CDC7-DBF4 complex during G1/S phase is required for the initiation of DNA replication. [UniProt]
Cellular Localization	Nucleus. [UniProt]

## Images



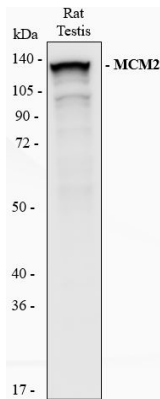
ARG66941 anti-MCM2 antibody [SQab22271] IHC-P image

Immunohistochemistry: Formalin/PFA-fixed and paraffin-embedded sections of Human tonsil stained with ARG66941 anti-MCM2 antibody [SQab22271]. Antigen Retrieval: Heat tissue section in Tris-EDTA buffer (pH 9.0).



ARG66941 anti-MCM2 antibody [SQab22271] WB image (Customer review)

Western blot: Jurkat stained with ARG66941 anti-MCM2 antibody [SQab22271] at 1:500 dilution.



ARG66941 anti-MCM2 antibody [SQab22271] WB image (Customer review)

Western blot: Rat testis stained with ARG66941 anti-MCM2 antibody [SQab22271] at 1:500 dilution.