

MCM6 Recombinant monoclonal antibody

Catalog Number: 86950-1-RR

Basic Information

Catalog Number: 86950-1-RR	GenBank Accession Number: BC032374	Purification Method: Protein A purification
Source: Rabbit	GeneID (NCBI): 4175	CloneNo.: 251235A8
Isotype: IgG	UNIPROT ID: Q14566	Recommended Dilutions: WB: 1:5000-1:50000 IHC: 1:1000-1:4000 IF/ICC: 1:500-1:2000
Immunogen Catalog Number: AG4180	Full Name: minichromosome maintenance complex component 6	
	Calculated MW: 821 aa, 93 kDa	
	Observed MW: 105 kDa	

Applications

Tested Applications: WB, IHC, IF/ICC, ELISA	Positive Controls:
Species Specificity: human	WB : HeLa cells, Jurkat cells, COLO 320 cells
Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0	IHC : human cervical cancer tissue,
	IF/ICC : HeLa cells,

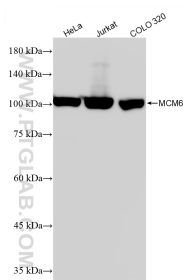
Background Information

The MCM genes were firstly identified in yeast defective in minichromosome maintenance and have since been shown to have roles in the progression of the cell cycle, and most of them are cell division control genes [PMID: 18096807]. MCM2-7 complex are suggested to be 'DNA licensing factors' which bind to the DNA after mitosis and enable DNA replication before being removed during S phase. Mini-chromosome maintenance 6 (MCM6) is one component of the MCM2-7 complex which is the putative replicative helicase essential for 'once per cell cycle' DNA replication initiation and elongation in eukaryotic cells [PMID: 9305914]. MCM6 single subunit forms homohexamers and contains an ATP-dependent and replication fork stimulated 3' to 5' DNA unwinding activity along with intrinsic DNA-dependent ATPase and ATP-binding activities [PMID: 21336027]. The calculated molecular weight of MCM6 is 92 kDa, but the modified MCM6 is about 105 kDa.

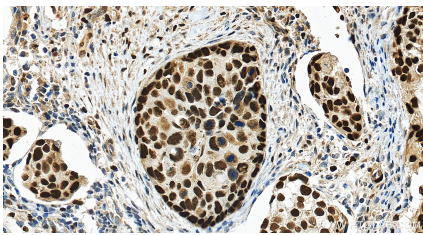
Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

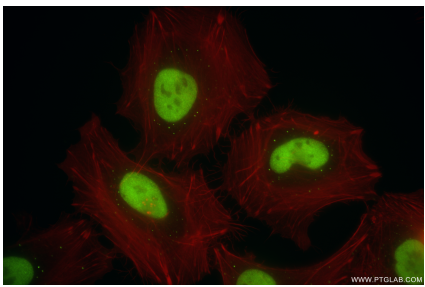
Selected Validation Data



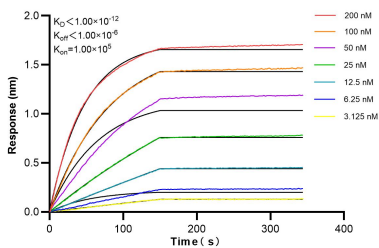
Various lysates were subjected to SDS PAGE followed by western blot with 86950-1-RR (MCM6 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human cervical cancer tissue slide using 86950-1-RR (MCM6 antibody) at dilution of 1:2000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using MCM6 antibody (86950-1-RR, Clone: 251235A8) at dilution of 1:1000 and Coralite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red).



Biolayer interferometry (BLI) kinetic assays of 86950-1-RR against Human MCM6 were performed. The affinity constant is below 1 pM.