

# MCM3 (Proliferation Marker) Antibody

Mouse Monoclonal Antibody [Clone MCM3/3221]

Catalog No	Format	Size
4172-MSM1-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
4172-MSM1-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
4172-MSM1-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

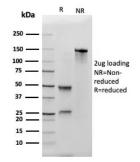
Applications	Tested Dillution	Note
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes

Product Details		
Clone	MCM3/3221	
Gene Name	MCM3	
Immunogen	Recombinant fragment (aa 650-750) of human MCM3 protein (exact sequence is proprietary)	
Host	Mouse	
Clonality	Monoclonal	
Isotype / Light Chain	IgG1 / Kappa	
Mol. Weight of Antigen	115kDa	
Cellular Localization	Nucleus.	
Species Reactivity	Human	
Positive Control	MCF-7, Jurkat or Ramos cells. Human colon or tonsil.	

<sup>\*</sup>Optimal dilution for a specific application should be determined.

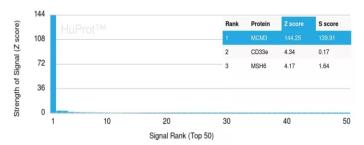
## Product Images for MCM3 (Proliferation Marker) Antibody



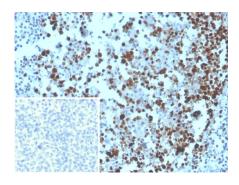


Formalin-fixed, paraffin-embedded human colon carcinoma stained with MCM3 Mouse Monoclonal Antibody (MCM3/3221). HIER: Tris/EDTA, pH9.0, 45min. 2°C: HRP-polymer, 30min. DAB, 5min.

SDS-PAGE Analysis of Purified MCM3 Mouse Monoclonal Antibody (MCM3/3221). Confirmation of Purity and Integrity of Antibody.



Analysis of Protein Array containing more than 19,000 full-length human proteinsusing MCM3 Mouse Monoclonal Antibody (MCM3/3221). Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProtTM array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProtTM are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target. A MAb is considered to specific to its intended target, if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.



Formalin-fixed, paraffin-embedded human tonsil stained with MCM3 Mouse Monoclonal Antibody (MCM3/3221). Inset: PBS instead of primary antibody, secondary only control.

### **Specificity & Comments**

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 DNA replication and cell proliferation.

#### Supplied As

200ug/ml of Ab produced in CHO cell mammalian-based expression system. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

### Storage and Stability

Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

### **Research Areas**

Nuclear Marker

### **Limitations and Warranty**

This antibody is available for research use only and is not approved for use in diagnosis. There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

