MCM4 (Pan Cancer Marker) Antibody

Mouse Monoclonal Antibody [Clone MCM4/3041]

Catalog No	Format	Size
4173-MSM1-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug
4173-MSM1-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
4173-MSM1-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug

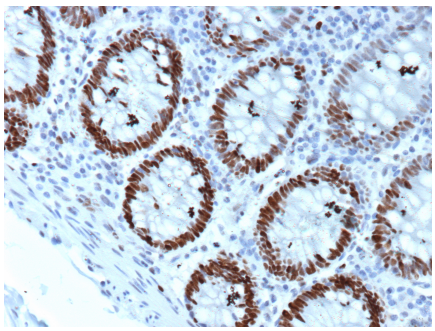
Applications	Tested Dillution	Note
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes
Western Blot (WB)	2-4ug/ml	

Product Details

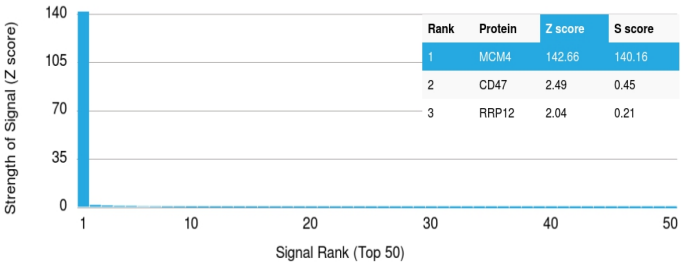
Clone	MCM4/3041
Gene Name	MCM4
Immunogen	Recombinant fragment (around aa600-800) of human MCM4 protein (exact sequence is proprietary)
Host	Mouse
Clonality	Monoclonal
Isotype / Light Chain	IgG1 / Kappa
Mol. Weight of Antigen	100kDa
Cellular Localization	Nucleus
Species Reactivity	Human
Positive Control	A-431 cells. Human colon.

**Optimal dilution for a specific application should be determined.*

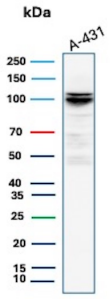
Product Images for MCM4 (Pan Cancer Marker) Antibody



Formalin-fixed, paraffin-embedded human colon stained with MCM4 Mouse Monoclonal Antibody (MCM4/3041). HIER: Tris/EDTA, pH9.0, 45min. 2°: HRP-polymer, 30min. DAB, 5min.



Analysis of Protein Array containing more than 19,000 full-length human proteinsusing MCM4 Mouse Monoclonal Antibody (MCM4/3041). 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.



Western Blot Analysis of A-431 cell lysate using MCM4 Mouse Monoclonal Antibody (MCM4/3041).

Specificity & Comments

The mini-chromosome maintenance (MCM) family of proteins, including MCM2, MCM3, MCM4 (Cdc21), MCM5 (Cdc46), MCM6 (Mis5) and MCM7 (Cdc47), are regulators of DNA replication that act to ensure replication occurs only once in the cell cycle. Expression of MCM proteins increases during cell growth, peaking at G1 to S phase. The MCM proteins each contain an ATP-binding motif, which is predicted to mediate ATP-dependent opening of double- stranded DNA. MCM proteins are regulated by E2F transcription factors, which induce MCM expression, and by protein kinases, which interact with MCM proteins to maintain the postreplicative state of the cell. MCM2/MCM4 complexes function as substrates for Cdc2/cyclin B in vitro. Cleavage of MCM3, which can be prevented by caspase inhibitors, results in the inactivation of the MCM complex (composed of at least MCM proteins 2-6) during apoptosis. A complex composed of MCM4, MCM6 and MCM7 has been shown to be involved in DNA helicase activity; and MCM5 is involved in IFN-?-induced Stat1? transcription activation.

Supplied As

200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. 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

Epigenetics

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.