

## Product Datasheet

### MSH6 Antibody (orb2642481)

<b>Description</b>	<p>The finding that mutations in DNA mismatch repair genes are associated with hereditary nonpolyposis colorectal cancer (HNPCC) has resulted in considerable interest in the understanding of the mechanism of DNA mismatch repair. Initially, inherited mutations in the MSH2 and MLH1 homologs of the bacterial DNA mismatch repair genes mutS and mutL were demonstrated at high frequency in HNPCC and were shown to be associated with microsatellite instability. A member of the mismatch repair family, GTBP (also designated MSH6), is an MSH2-related protein that binds to DNA containing G/T mismatches. Findings suggest that the mismatch-binding factor in human cells is composed of a heterodimer of GTBP and MSH2.</p>
<b>Species/Host</b>	Mouse
<b>Reactivity</b>	Human
<b>Conjugation</b>	Unconjugated
<b>Tested Applications</b>	ELISA, IF, IHC-P, WB
<b>Immunogen</b>	A portion of amino acids 374-540 from the human protein were used as the immunogen for this MSH6 antibody.
<b>Preservatives</b>	0.2 mg/ml in 1X PBS with 0.1 mg/ml rAlbumin (US sourced) and 0.05% sodium azide
<b>Storage</b>	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
<b>Note</b>	For research use only
<b>Application notes</b>	Optimal dilution of the MSH6 antibody should be determined by the researcher.1. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.
<b>Formula</b>	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide

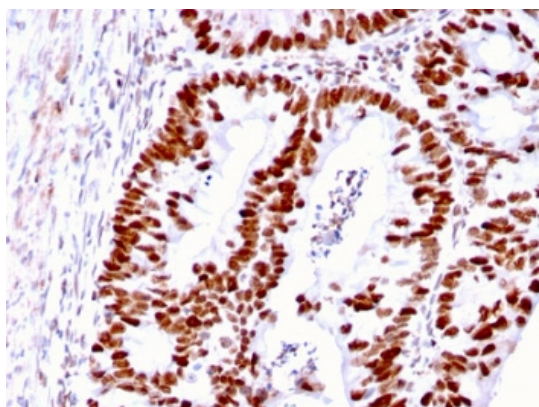
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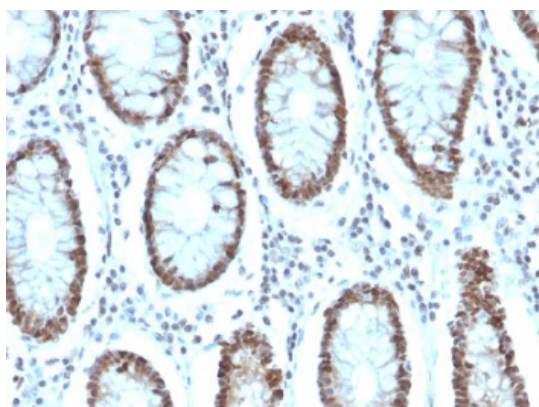
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<b>Isotype</b>	Mouse IgG2b, kappa
<b>Clonality</b>	Monoclonal
<b>Clone Number</b>	MSH6/3085
<b>Antibody Type</b>	Primary Antibody
<b>Purity</b>	Protein G affinity chromatography
<b>Uniprot ID</b>	<b>P52701</b>
<b>Hazard Information</b>	This MSH6 antibody is available for research use only.
<b>Dilution Range</b>	ELISA: order BSA/sodium azide-free format for coating, Immunofluorescence: 1-2ug/ml, Western blot: 1-2ug/ml, Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT
<b>Expiration Date</b>	12 months from date of receipt.



IHC staining of FFPE human colon carcinoma with MSH6 antibody. HIER: boil tissue sections in pH9 10 mM Tris with 1 mM EDTA for 10-20 min and allow to cool before testing.



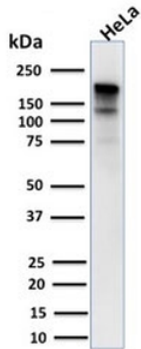
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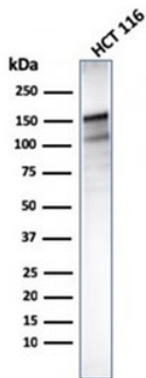
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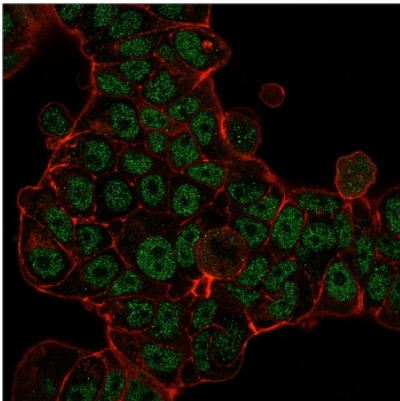
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Western blot testing of human HeLa lysate with MSH6 antibody (clone MSH6/3085). Predicted molecular weight ~160 kDa.



Western blot testing of human HCT-116 lysate with MSH6 antibody (clone MSH6/3085). Predicted molecular weight ~160 kDa.



Immunofluorescent staining of permeabilized human MCF7 cells with MSH6 antibody (green, clone MSH6/3085) and Phalloidin (red).

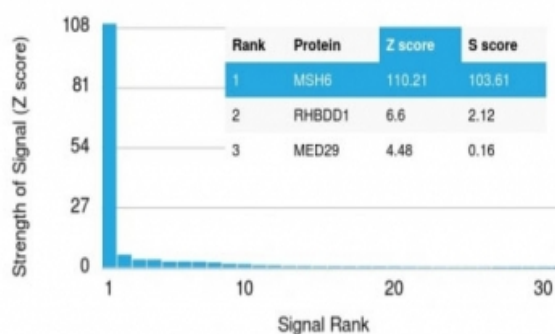
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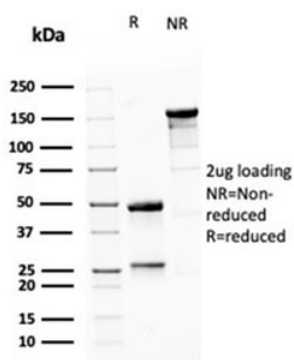
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### Human Protein Microarray Specificity Validation



Analysis of HuProt (TM) microarray containing more than 19000 full-length human proteins using MSH6 antibody. These results demonstrate the foremost specificity of the MSH6/3085 mAb. Z- and S- score: The Z-score represents the strength of a signal that an antibody (in combination with a fluorescently-tagged anti-IgG secondary Ab) produces when binding to a particular protein on the HuProt (TM) array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If the targets on the HuProt (TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-scores. The S-score therefore represents the relative target specificity of an Ab to its intended target.



SDS-PAGE analysis of purified, BSA-free MSH6 antibody (clone MSH6/3085) as confirmation of integrity and purity.

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