

Product Datasheet

MLH1 Antibody (MLH1/6284R)

NBP3-13971-100ug

Unit Size: 100 ug

Store at 4C.

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NBP3-13971-100ug

MLH1 Antibody (MLH1/6284R)

Product Information	
Unit Size	100 ug
Concentration	0.2 mg/ml
Storage	Store at 4C.
Clonality	Monoclonal
Clone	MLH1/6284R
Preservative	0.05% Sodium Azide
Isotype	IgG Kappa
Purity	Protein A or G purified
Buffer	10 mM PBS with 0.05% BSA
Target Molecular Weight	85 kDa

Product Description	
Description	<p>200ug/ml of antibody purified from Bioreactor Concentrate by Protein A or G. Prepared in 10 mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0 mg/ml. (NBP3-14124)</p> <p>Antibody with azide - store at 2 to 8C. Antibody without azide - store at -20 to -80 C.</p>
Host	Rabbit
Gene ID	4292
Gene Symbol	MLH1
Species	Human
Specificity/Sensitivity	<p>This monoclonal antibody recognizes a protein of 83kDa, identified as MLH1. Defects in MLH1 are the cause of hereditary non-polyposis colorectal cancer type 2 (HNPCC2). Heterodimerizes with PMS2 to form MutL alpha, a component of the post-replicative DNA mismatch repair system (MMR). DNA repair is initiated by MutS alpha (MSH2-MSH6) or MutS beta (MSH2-MSH6) binding to a dsDNA mismatch, then MutL alpha is recruited to the heteroduplex. Assembly of the MutL-MutS-heteroduplex ternary complex in presence of RFC and PCNA is sufficient to activate endonuclease activity of PMS2. It introduces single-strand breaks near the mismatch and thus generates new entry points for the exonuclease EXO1 to degrade the strand containing the mismatch. DNA methylation would prevent cleavage and therefore assure that only the newly mutated DNA strand is going to be corrected. MutL alpha (MLH1-PMS2) interacts physically with the clamp loader subunits of DNA polymerase III, suggesting that it may play a role to recruit the DNA polymerase III to the site of the MMR. Also implicated in DNA damage signaling, a process, which induces cell cycle arrest and can lead to apoptosis in case of major DNA damages. Heterodimerizes with MLH3 to form MutL gamma, which plays a role in meiosis.</p>
Immunogen	Recombinant full-length human MLH1 protein (Uniprot: P40692)

Product Application Details	
Applications	Western Blot, Immunohistochemistry-Paraffin
Recommended Dilutions	Western Blot 1-2 ug/ml, Immunohistochemistry-Paraffin 1-2 ug/ml

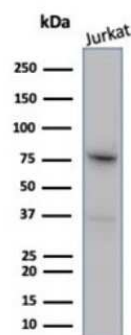


Application Notes

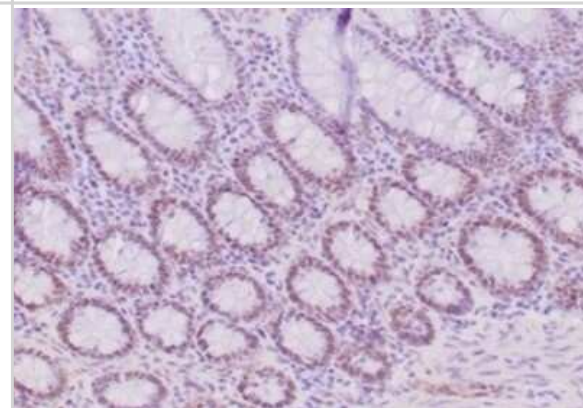
Immunohistochemistry (Formalin-fixed): 1-2ug/ml for 30 minutes at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95C followed by cooling at RT for 20 minutes

Images

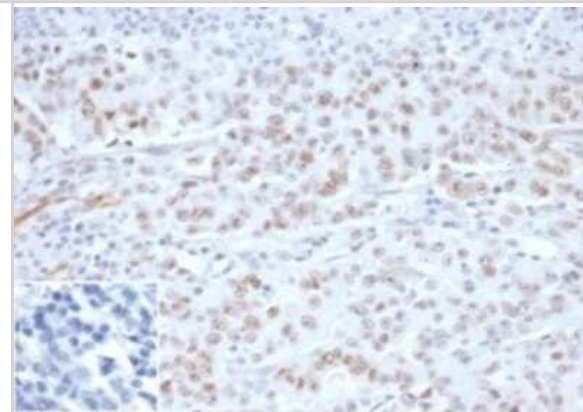
Western Blot: MLH1 Antibody (MLH1/6284R) [NBP3-13971] - Western blot analysis of Jurkat cell lysate using MLH1 antibody (MLH1/6284R).



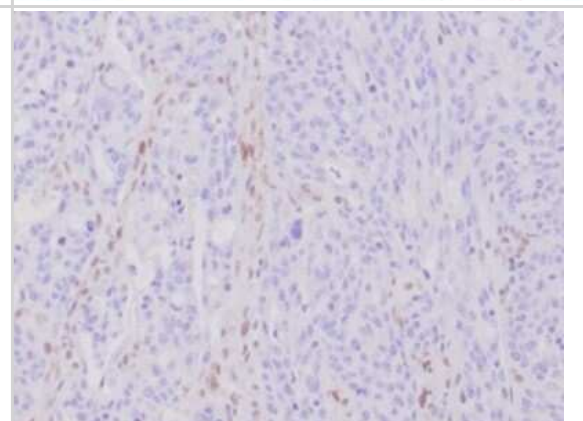
Immunohistochemistry-Paraffin: MLH1 Antibody (MLH1/6284R) [NBP3-13971] - Formalin-fixed, paraffin-embedded human colon carcinoma stained with MLH1 antibody (MLH1/6284R).



Immunohistochemistry-Paraffin: MLH1 Antibody (MLH1/6284R) [NBP3-13971] - MLH1 antibody (MLH1/6284R). MLH1 Recombinant Rabbit Monoclonal (MLH1/6284R). Inset: PBS instead of primary antibody; secondary only negative control.



Immunohistochemistry-Paraffin: MLH1 Antibody (MLH1/6284R) [NBP3-13971] - FFPE human Hereditary Nonpolyposis Colorectal Cancer (HNPCC) / Lynch Syndrome. MLH1 antibody (MLH1/6284R) (2ug/ml).





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HAF008	Goat anti-Rabbit IgG Secondary Antibody [HRP]
NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
H00004292-Q01-10ug	Recombinant Human MLH1 GST (N-Term) Protein
H00004292-P01-10ug	Recombinant Human MLH1 GST (N-Term) Protein

Limitations

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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