

Product Datasheet

MLH1 Antibody (MLH1/6467) - Azide and BSA Free NBP3-14122

Unit Size: 100 ug

Store at -20 to -80C. Avoid freeze-thaw cycles.

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NBP3-14122

MLH1 Antibody (MLH1/6467) - Azide and BSA Free

Product Information	
Unit Size	100 ug
Concentration	1 mg/ml
Storage	Store at -20 to -80C. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	MLH1/6467
Preservative	No Preservative
Isotype	IgG1 Kappa
Purity	Protein A or G purified
Buffer	10mM PBS
Target Molecular Weight	85 kDa

Product Description	
Description	1.0 mg/ml of antibody purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS WITHOUT BSA & azide. Also available at 200 ug/ml WITH BSA & azide (NBP3-13969). Antibody with azide - store at 2 to 8C. Antibody without azide - store at -20 to -80 C.
Host	Mouse
Gene ID	4292
Gene Symbol	MLH1
Species	Human
Specificity/Sensitivity	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.
Immunogen	Recombinant full-length human MLH1 protein (Uniprot: P40692)

Product Application Details	
Applications	Immunohistochemistry-Paraffin
Recommended Dilutions	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



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Products Related to NBP3-14122

HAF007	Goat anti-Mouse IgG Secondary Antibody [HRP]
NB720-B	Rabbit anti-Mouse IgG (H+L) Secondary Antibody [Biotin]
NBP1-43319-0.5mg	Mouse IgG1 Kappa Isotype Control (P3.6.2.8.1)
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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