# **Product Datasheet**

## MLH1 Antibody (MLH1/6284R) [CoraFluor™ 1] NBP3-14124CL1

Unit Size: 0.1 ml

Store at 4C in the dark. Do not freeze.

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## NBP3-14124CL1

MLH1 Antibody (MLH1/6284R) [CoraFluor™ 1]

WEITI Antibody (WEITI/020411) [	
Product Information	
Unit Size	0.1 ml
Concentration	Please see the vial label for concentration. If unlisted please contact technical services.
Storage	Store at 4C in the dark. Do not freeze.
Clonality	Monoclonal
Clone	MLH1/6284R
Preservative	No Preservative
Isotype	IgG Kappa
Conjugate	CoraFluor 1
Purity	Protein A or G purified
Buffer	PBS
Product Description	
Description	CoraFluor(TM) 1 is a high performance terbium-based TR-FRET (Time-Resolved Fluorescence Resonance Energy Transfer) or TRF (Time-Resolved Fluorescence) donor for high throughput assay development. CoraFluor(IM) 1 absorbs UV light at approximately 340 nm, and emits at approximately 490 nm, 545 nm, 585 nm and 620 nm. It is compatible with common acceptor dyes that absorb at the emission wavelengths of CoraFluor(TM) 1. CoraFluor(TM) 1 can be used for the development of robust and scalable TR-FRET binding assays such as target engagement, ternary complex, protein-protein interaction and protein quantification assays.
Host	Rabbit
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)
Notes	CoraFluor (TM) is a trademark of Bio-Techne Corp. Sold for research purposes only under agreement from Massachusetts General Hospital. US patent 2022/0025254



Product Application Details	
Applications	Immunohistochemistry-Paraffin
Recommended Dilutions	Immunohistochemistry-Paraffin
Application Notes	Optimal dilution of this antibody should be experimentally determined.





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### Products Related to NBP3-14124CL1

H00004292-Q01-10ug Recombinant Human MLH1 GST (N-Term) Protein Recombinant Human MLH1 GST (N-Term) Protein

AF2535 MMR/CD206/Mannose Receptor Antibody [Unconjugated]

AF748 E-Cadherin Antibody [Unconjugated]

#### 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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