Leader in Biomolecular Solutions for Life Science

[KO Validated] MLH1 Rabbit mAb

Catalog No.: A25641

Recombinant | 1 Publications

www.abclonal.com

Basic Information

Observed MW
85 kDa

Calculated MW
85 kDa

Category
Monoclonal Antibodies

Applications
WB, IHC-P, mIHC, ELISA

Cross Reactivity
Human,Mouse

Clone No.
ARC53543

Background

The protein encoded by this gene can heterodimerize with mismatch repair endonuclease PMS2 to form MutL alpha, part of the DNA mismatch repair system. When MutL alpha is bound by MutS beta and some accessory proteins, the PMS2 subunit of MutL alpha introduces a single-strand break near DNA mismatches, providing an entry point for exonuclease degradation. The encoded protein is also involved in DNA damage signaling and can heterodimerize with DNA mismatch repair protein MLH3 to form MutL gamma, which is involved in meiosis. This gene was identified as a locus frequently mutated in hereditary nonpolyposis colon cancer (HNPCC).

Recommended Dilutions

WB	1:8000 - 1:16000
IHC-P	1:100 - 1:500
mIHC	1:100 - 1:200

ELISA
Recommended starting concentration is 1 μg/mL. Please optimize the concentration based on your specific assay requirements.

Immunogen Information

Gene ID
4292

Swiss-Prot
P40692

Immunogen
Synthetic peptide. This information is considered to be commercially sensitive.

Synonyms
FCC2; COCA2; HNPCC; MLH-1; hMLH1; HNPCC2; LYNCH2; MMRCS1

Contact

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www.abclonal.com.cn

Product Information

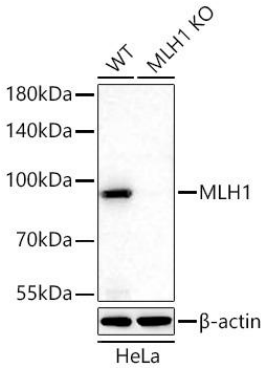
Source
Rabbit

Isotype
IgG

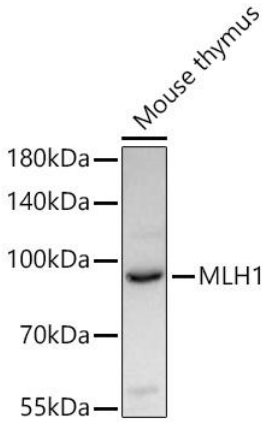
Purity
Affinity purification

Storage
Store at -20℃
Buffer: PBS containing 50% glycerol and 0.05% BSA, preserved with proclin300 or sodium azide (as specified on the Certificate of Analysis), pH 7.3.

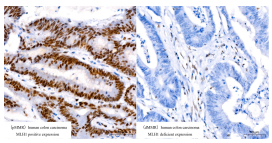
Validation Data



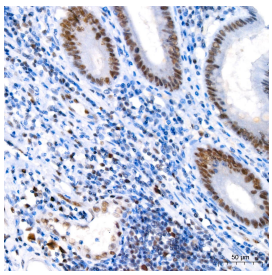
Western blot analysis of lysates from wild type (WT) and MLH1 knockout (KO) HeLa cells using [KO Validated] MLH1 Rabbit mAb (A25641) at 1:8000 dilution incubated at room temperature for 1.5 hours.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1: 10000 dilution.
Lysates/proteins: 25 µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 60 s.



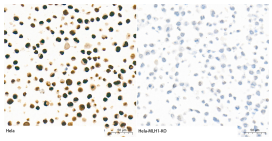
Western blot analysis of lysates from Mouse thymus using [KO Validated] MLH1 Rabbit mAb (A25641) at 1:8000 dilution incubated at room temperature for 1.5 hours.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1: 10000 dilution.
Lysates/proteins: 25 µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 20 s.



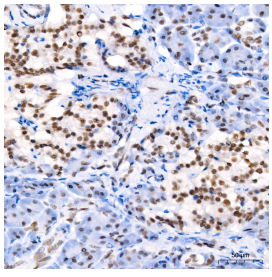
Immunohistochemistry analysis of paraffin-embedded Human colon carcinoma tissue using [KO Validated] MLH1 Rabbit mAb (A25641) at a dilution of 1:100 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate Buffer (pH 6.0) prior to IHC staining.



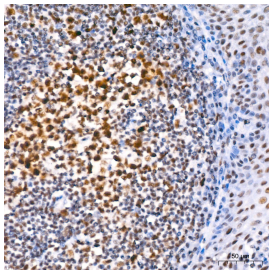
Immunohistochemistry analysis of paraffin-embedded Human appendix tissue using [KO Validated] MLH1 Rabbit mAb (A25641) at a dilution of 1:100 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate Buffer (pH 6.0) prior to IHC staining.



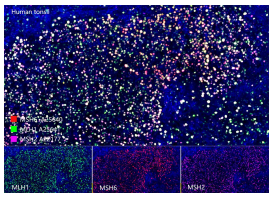
Immunohistochemistry analysis of paraffin-embedded Human HeLa and HeLa-MLH1-KO cell line using [KO Validated] MLH1 Rabbit mAb (A25641) at a dilution of 1:100 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



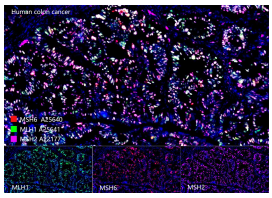
Immunohistochemistry analysis of paraffin-embedded Human pancreas tissue using [KO Validated] MLH1 Rabbit mAb (A25641) at a dilution of 1:100 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate Buffer (pH 6.0) prior to IHC staining.



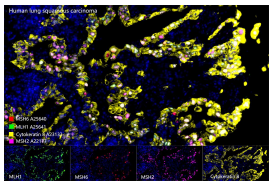
Immunohistochemistry analysis of paraffin-embedded Human tonsil tissue using [KO Validated] MLH1 Rabbit mAb (A25641) at a dilution of 1:100 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate Buffer (pH 6.0) prior to IHC staining.



The multiplex IHC analysis on paraffin-embedded Human tonsil tissue using the following specific primary antibodies and tyramide signal amplification (TSA) reagents (RK05903) : [KO Validated] MLH1 Rabbit mAb (A25641, 1:100) with TSA-TYR-520 (Green), and [KO Validated] MSH6 Rabbit mAb (A25640, 1:1000) with TSA-TYR-570 (Red), and [KO Validated] MSH2 Rabbit mAb (A22177, 1:500) with TSA-TYR-480 (Magenta). DAPI (Blue) was used for nuclear staining. Prior to multiplex IHC staining, high-pressure antigen retrieval was performed using 0.01M citrate buffer at pH 6.0. The analysis was completed using a 40x objective lens.



The multiplex IHC analysis on paraffin-embedded Human colon cancer tissue using the following specific primary antibodies and tyramide signal amplification (TSA) reagents (RK05903) : [KO Validated] MLH1 Rabbit mAb (A25641, 1:100) with TSA-TYR-520 (Green), and [KO Validated] MSH6 Rabbit mAb (A25640, 1:1000) with TSA-TYR-570 (Red), and [KO Validated] MSH2 Rabbit mAb (A22177, 1:500) with TSA-TYR-480 (Magenta). DAPI (Blue) was used for nuclear staining. Prior to multiplex IHC staining, high-pressure antigen retrieval was performed using 0.01M citrate buffer at pH 6.0. The analysis was completed using a 40x objective lens.



The multiplex IHC analysis on paraffin-embedded Human lung squamous carcinoma tissue using the following specific primary antibodies and tyramide signal amplification (TSA) reagents (RK05903) : [KO Validated] MLH1 Rabbit mAb (A25641, 1:100) with TSA-TYR-520 (Green), and [KO Validated] MSH6 Rabbit mAb (A25640, 1:1000) with TSA-TYR-570 (Red), and [KO Validated] MSH2 Rabbit mAb (A22177, 1:500) with TSA-TYR-620 (Magenta), and Cytokeratin 8 Rabbit mAb (A23133, 1:100) with TSA-TYR-690 (Yellow). DAPI (Blue) was used for nuclear staining. Prior to multiplex IHC staining, high-pressure antigen retrieval was performed using 0.01M citrate buffer at pH 6.0. The analysis was completed using a 40x objective lens.