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# [KO Validated] MLH1 Rabbit mAb

**Catalog No.: A25641**   KO Validated   Recombinant   1 Publications

## Basic Information

**Observed MW**
85kDa

**Calculated MW**
85kDa

**Category**
SMab Recombinant Monoclonal
Antibody

**Applications**
WB,IHC-P,ELISA

**Cross-Reactivity**
Human,Mouse

**CloneNo number**
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** | 1:10000 - 1:70000 |
| **IHC-P** | 1:100 - 1:500 |
| **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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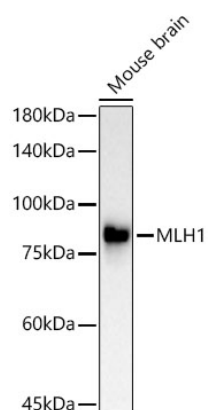## Product Information

**Source**
Rabbit

**Isotype**
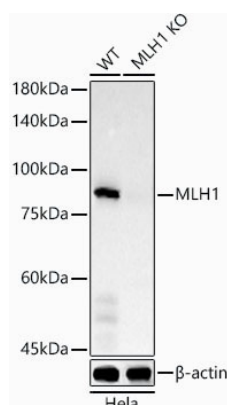IgG

**Purification**
Affinity purification

**Storage**
Store at -20℃. Avoid freeze / thaw cycles.
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.
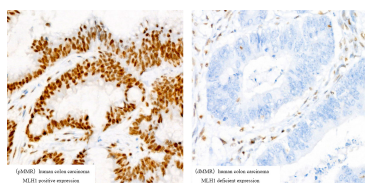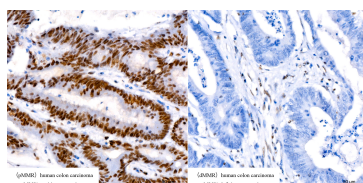
# Validation Data



Western blot analysis of lysates from mouse brain, using [KO Validated] MLH1 Rabbit mAb (A4858) at 1:60000 dilution.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 25µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
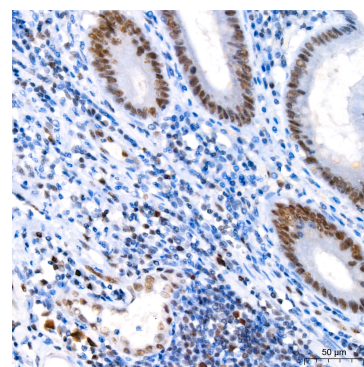Detection: ECL Basic Kit (RM00020).
Exposure time: 180s.



Western blot analysis of lysates from wild type (WT) and MLH1 knockout (KO) HeLa cells, using [KO Validated] MLH1 Rabbit mAb (A4858) at 1:60000 dilution.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 25µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 180s.







Immunohistochemistry analysis of paraffin-embedded Human colon carcinoma using [KO Validated] MLH1 Rabbit mAb (A4858) at dilution of 1:100 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.
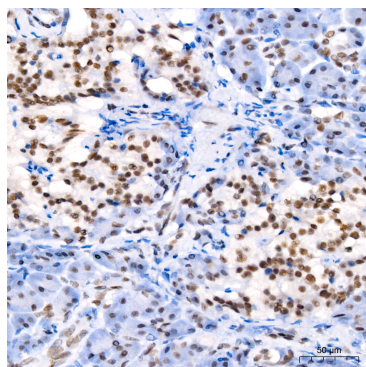
Immunohistochemistry analysis of paraffin-embedded Human colon carcinoma tissue using [KO Validated] MLH1 Rabbit mAb (A25641) at a dilution of 1:100 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate Buffer (pH 6.0) prior to IHC staining.
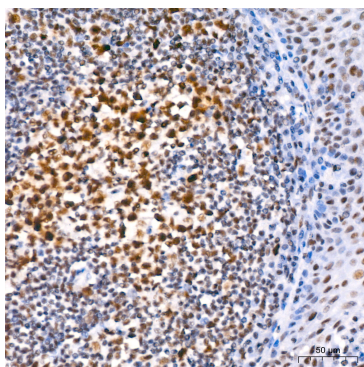
Immunohistochemistry analysis of paraffin-embedded Human appendix tissue using [KO Validated] MLH1 Rabbit mAb (A25641) at a dilution of 1:100 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate Buffer (pH 6.0) prior to IHC staining.
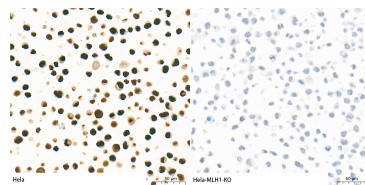
# Validation Data



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.



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.