

# Recombinant Human MLH1 293 Cell Lysate

**Cat. No.** MLH1-4295HCL    **Lot. No.** (See product label)

## SPECIFICATION

### Product Overview

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species</b>             | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Source</b>              | HEK293                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Description</b>         | Antigen standard for mutL homolog 1, colon cancer, nonpolyposis type 2 (E. coli) (MLH1), transcript variant 1 is a lysate prepared from HEK293T cells transiently transfected with a TrueORF gene-carrying pCMV plasmid and then lysed in RIPA Buffer. Protein concentration was determined using a colorimetric assay. The antigen control carries a C-terminal Myc/DDK tag for detection.                                                           |
| <b>Components</b>          | This product includes 3 vials: 1 vial of gene-specific cell lysate, 1 vial of control vector cell lysate, and 1 vial of loading buffer. Each lysate vial contains 0.1 mg lysate in 0.1 ml (1 mg/ml) of RIPA Buffer (50 mM Tris-HCl pH7.5, 250 mM NaCl, 5 mM EDTA, 50 mM NaF, 1% NP40). The loading buffer vial contains 0.5 ml 2X SDS Loading Buffer (125 mM Tris-Cl, pH6.8, 10% glycerol, 4% SDS, 0.002% Bromophenol blue, 5% beta-mercaptoethanol). |
| <b>Size</b>                | 0.1 mg                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Storage Instruction</b> | Store at -80°C. Minimize freeze-thaw cycles. After addition of 2X SDS Loading Buffer, the lysates can be stored at -20°C. Product is guaranteed 6 months from the date of shipment.                                                                                                                                                                                                                                                                   |

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**Applications**

ELISA, WB, IP. WB: Mix equal volume of lysates with 2X SDS Loading Buffer. Boil the mixture for 10 min before loading (for membrane protein lysates, incubate the mixture at room temperature for 30 min). Load 5 ug lysate per lane.

**GENE INFORMATION**

**Gene Name** [MLH1 mutL homolog 1, colon cancer, nonpolyposis type 2 \(E. coli\) \[ Homo sapiens \]](#)

**Official Symbol** MLH1

**Synonyms** MLH1; mutL homolog 1, colon cancer, nonpolyposis type 2 (E. coli); COCA2, mutL (E. coli) homolog 1 (colon cancer, nonpolyposis type 2); DNA mismatch repair protein Mlh1; FCC2; HNPCC; HNPCC2; COCA2; hMLH1; MGC5172;

**Gene ID** [4292](#)

**mRNA Refseq** [NM\\_000249](#)

**Protein Refseq** [NP\\_000240](#)

**MIM** [120436](#)

**UniProt ID** [P40692](#)

**Chromosome Location** 3p22.3

**Pathway** BRCA1-associated genome surveillance complex (BASC), organism-specific biosystem; Colorectal cancer, organism-specific biosystem; Colorectal cancer, conserved biosystem; Direct p53 effectors, organism-specific biosystem; Endometrial cancer, organism-specific biosystem; Endometrial cancer, conserved biosystem;

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Fanconi anemia pathway, organism-specific biosystem;

**Function**

ATP binding; ATPase activity; contributes\_to MutSalpha complex binding;  
guanine/thymine mispair binding; mismatched DNA binding; protein binding;  
contributes\_to protein binding; contributes\_to single-stranded DNA binding;

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