

## Recombinant Human MLH1 293 Cell Lysate

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

### SPECIFICATION

<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.
<b>Applications</b>	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

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mixture at room temperature for 30 min). Load 5 ug lysate per lane.

## GENE INFORMATION

<b>Gene Name</b>	MLH1 mutL homolog 1, colon cancer, nonpolyposis type 2 (E. coli) [ Homo sapiens ]
<b>Official Symbol</b>	MLH1
<b>Synonyms</b>	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;
<b>Gene ID</b>	<a href="#">4292</a>
<b>mRNA Refseq</b>	<a href="#">NM_000249</a>
<b>Protein Refseq</b>	<a href="#">NP_000240</a>
<b>MIM</b>	<a href="#">120436</a>
<b>UniProt ID</b>	<a href="#">P40692</a>
<b>Chromosome Location</b>	3p22.3
<b>Pathway</b>	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; Fanconi anemia pathway, organism-specific biosystem;

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**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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