

## Recombinant Human MSH2 293 Cell Lysate

**Cat. No.** MSH2-4120HCL    **Lot. No.** (See product label)

### SPECIFICATION

<b>Species</b>	Human
<b>Source</b>	HEK293
<b>Description</b>	Antigen standard for mutS homolog 2, colon cancer, nonpolyposis type 1 (E. coli) (MSH2) 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

**Gene Name** [MSH2 mutS homolog 2, colon cancer, nonpolyposis type 1 \(E. coli\) \[ Homo sapiens \]](#)

**Official Symbol** MSH2

**Synonyms** MSH2; mutS homolog 2, colon cancer, nonpolyposis type 1 (E. coli); COCA1, mutS (E. coli) homolog 2 (colon cancer, nonpolyposis type 1); DNA mismatch repair protein Msh2; HNPCC; HNPCC1; hMSH2; FCC1; COCA1; LCFS2;

**Gene ID** [4436](#)

**mRNA Refseq** [NM\\_000251](#)

**Protein Refseq** [NP\\_000242](#)

**MIM** [609309](#)

**UniProt ID** [P43246](#)

**Chromosome Location** 2p21

**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; Mismatch repair, organism-specific biosystem; Mismatch repair, conserved biosystem; Pathways in cancer, organism-specific biosystem;

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**Function**

contributes\_to ADP binding; contributes\_to ATP binding; contributes\_to ATPase activity; DNA binding; DNA-dependent ATPase activity; contributes\_to MutLalpha complex binding; Y-form DNA binding; centromeric DNA binding; damaged DNA binding; contributes\_to dinucleotide insertion or deletion binding; contributes\_to dinucleotide repeat insertion binding; double-strand/single-strand DNA junction binding; contributes\_to double-stranded DNA binding; enzyme binding; contributes\_to four-way junction DNA binding; contributes\_to guanine/thymine mispair binding; guanine/thymine mispair binding; loop DNA binding; contributes\_to magnesium ion binding; contributes\_to mismatched DNA binding; nucleotide binding; contributes\_to oxidized purine DNA binding; protein C-terminus binding; protein binding; contributes\_to protein binding; protein homodimerization activity; protein kinase binding; contributes\_to single guanine insertion binding; contributes\_to single thymine insertion binding; contributes\_to single-stranded DNA binding;

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