

Recombinant Human MLH1 Protein, His tagged

Cat. No. MLH1-13H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Purified recombinant protein of Human mutL homolog 1, colon cancer, nonpolyposis type 2 (E. coli) (MLH1), transcript variant 1, Ser339-Glu558, with N-terminal His tag, expressed in E.coli.
Species	Human
Source	E. coli
ProteinLength	339-558 aa
Description	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).
Molecular Mass	24.5 kDa
Purity	> 80% as determined by SDS-PAGE and Coomassie blue staining
Note	For testing in cell culture applications, please filter before use. Note that you may

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experience some loss of protein during the filtration process.

Stability	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
Storage	Store at -80 centigrade after receiving vials.
Storage Buffer	25 mM Tris-HCl, pH 8.0, 150 mM NaCl, 10% glycerol
Concentration	>0.05 µg/µL as determined by microplate BCA method
Shipping	Dry Ice

GENE INFORMATION

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

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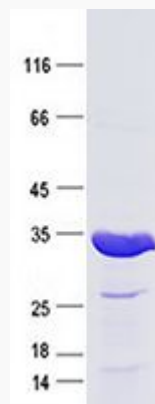
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UniProt ID

P40692

SDS-PAGE

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