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# Product datasheet for TP762356

## MLH1 (NM_000249) Human Recombinant Protein

### Product data:

| | |
|---|---|
| **Product Type:** | Recombinant Proteins |
| **Description:** | 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, 50ug |
| **Species:** | Human |
| **Expression Host:** | E. coli |
| **Expression cDNA Clone or AA Sequence:** | A DNA sequence encoding the region(Ser339-Glu558) of MLH1 |
| **Tag:** | N-His |
| **Predicted MW:** | 24.5 kDa |
| **Concentration:** | >0.05 µg/µL as determined by microplate BCA method |
| **Purity:** | > 80% as determined by SDS-PAGE and Coomassie blue staining |
| **Buffer:** | 25 mM Tris-HCl, pH 8.0, 150 mM NaCl, 10% glycerol |
| **Note:** | For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process. |
| **Storage:** | Store at -80°C after receiving vials. |
| **Stability:** | Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles. |
| **RefSeq:** | NP_000240 |
| **Locus ID:** | 4292 |
| **UniProt ID:** | P40692 |
| **RefSeq Size:** | 2662 |
| **Cytogenetics:** | 3p22.2 |
| **RefSeq ORF:** | 2268 |
| **Synonyms:** | COCA2; FCC2; hMLH1; HNPCC; HNPCC2; MMRCS1 |

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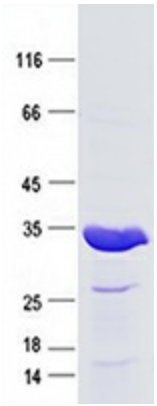
**Summary:** The protein encoded by this gene can heterodimerize with mismatch repair endonuclease PMS2 to form MutL alpha, part of the DNA mismatch repair system. When MutL alpha is bound by MutS beta and some accessory proteins, the PMS2 subunit of MutL alpha introduces a single-strand break near DNA 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). [provided by RefSeq, Aug 2017]

**Protein Families:** Druggable Genome

**Protein Pathways:** Colorectal cancer, Endometrial cancer, Mismatch repair, Pathways in cancer

## Product images:




Purified recombinant protein MLH1 was analyzed by SDS-PAGE gel and Coomossie Blue Staining.

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