

## **Product datasheet for TP762401**

## OriGene Technologies, Inc.

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## PMS2 (NM\_000535) Human Recombinant Protein

**Product data:** 

**Product Type:** Recombinant Proteins

**Description:** Purified recombinant protein of Human PMS2 postmeiotic segregation increased 2 (S.

cerevisiae) (PMS2), transcript variant 1, Ala626-Asn708, 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 (Ala626-Asn708) of PMS2

Tag: N-His

**Predicted MW:** 9.7 kDa

**Concentration:** >0.05 μg/μL as determined by microplate BCA method

**Purity:** >80% as determined by SDS-PAGE and Coomassie blue staining

**Buffer:** 50 mM Tris-HCl, pH 8.0, 8 M urea

**Note:** For testing in cell culture applications, please filter before use. Note that you may experience

some loss of protein during the filtration process.

**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 000526

**Locus ID:** 5395

**UniProt ID:** P54278, B4DGM0, Q7Z3Q2

RefSeq Size: 2851
Cytogenetics: 7p22.1
RefSeq ORF: 2586

Synonyms: HNPCC4; MLH4; MMRCS4; PMS2CL; PMSL2



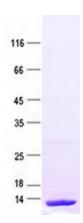


Summary:

The protein encoded by this gene is a key component of the mismatch repair system that functions to correct DNA mismatches and small insertions and deletions that can occur during DNA replication and homologous recombination. This protein forms heterodimers with the gene product of the mutL homolog 1 (MLH1) gene to form the MutL-alpha heterodimer. The MutL-alpha heterodimer possesses an endonucleolytic activity that is activated following recognition of mismatches and insertion/deletion loops by the MutS-alpha and MutS-beta heterodimers, and is necessary for removal of the mismatched DNA. There is a DQHA(X)2E(X)4E motif found at the C-terminus of the protein encoded by this gene that forms part of the active site of the nuclease. Mutations in this gene have been associated with hereditary nonpolyposis colorectal cancer (HNPCC; also known as Lynch syndrome) and Turcot syndrome. [provided by RefSeq, Apr 2016]

Protein Families: Druggable Genome
Protein Pathways: Mismatch repair

## **Product images:**



Purified recombinant protein PMS2 was analyzed by SDS-PAGE gel and Coomossie Blue Staining.