

Product datasheet for **KN201607RB**

MLH1 Human Gene Knockout Kit (CRISPR)

Product data:

Product Type: Knockout Kits (CRISPR)

Format: 2 gRNA vectors, 1 RFP-BSD donor, 1 scramble control

Donor DNA: RFP-BSD

Symbol: MLH1

Locus ID: 4292

Components: **KN201607G1**, MLH1 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)
KN201607G2, MLH1 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)
KN201607RBD, donor DNA containing left and right homologous arms and RFP-BSD functional cassette.
GE100003, scramble sequence in pCas-Guide vector

Disclaimer: These products are manufactured and supplied by OriGene under license from ERS. The kit is designed based on the best knowledge of CRISPR technology. The system has been functionally validated for knocking-in the cassette downstream the native promoter. The efficiency of the knock-out varies due to the nature of the biology and the complexity of the experimental process.

RefSeq: [NM_000249](#), [NM_001167617](#), [NM_001167618](#), [NM_001167619](#), [NM_001258271](#),
[NM_001258273](#), [NM_001258274](#), [NM_001354615](#), [NM_001354616](#), [NM_001354617](#),
[NM_001354618](#), [NM_001354619](#), [NM_001354620](#), [NM_001354621](#), [NM_001354622](#),
[NM_001354623](#), [NM_001354624](#), [NM_001354625](#), [NM_001354626](#), [NM_001354627](#),
[NM_001354628](#), [NM_001354629](#), [NM_001354630](#)

UniProt ID: [P40692](#)

Synonyms: COCA2; FCC2; hMLH1; HNPCC; HNPCC2

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]



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Product images:

