

Product datasheet for RC205848L1

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OriGene Technologies, Inc.

MSH2 (NM_000251) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: MSH2 (NM_000251) Human Tagged Lenti ORF Clone

Tag: Myc-DDK

Symbol: MSH2

Synonyms: COCA1; FCC1; hMSH2; HNPCC; HNPCC1; LCFS2; MMRCS2

Mammalian Cell None

Selection:

Vector:pLenti-C-Myc-DDK (PS100064)E. coli Selection:Chloramphenicol (34 ug/mL)

ORF Nucleotide The ORF insert of this clone is exactly the same as(RC205848).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

ACCN: NM_000251

ORF Size: 2802 bp



MSH2 (NM_000251) Human Tagged Lenti ORF Clone - RC205848L1

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of

reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing

variants is recommended prior to use. More info

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube

containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method: 1. Centrifuge at 5,000xg for 5min.

2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.

3. Close the tube and incubate for 10 minutes at room temperature.

4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid

at the bottom.

5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of

shipping when stored at -20°C.

RefSeq: <u>NM 000251.1</u>

 RefSeq Size:
 3226 bp

 RefSeq ORF:
 2805 bp

 Locus ID:
 4436

 UniProt ID:
 P43246

Cytogenetics: 2p21-p16.3

Domains: MutS_V, MutS_I, MutS_II, MutS_IV

Protein Families: Druggable Genome, Stem cell - Pluripotency

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

MW: 104.7 kDa

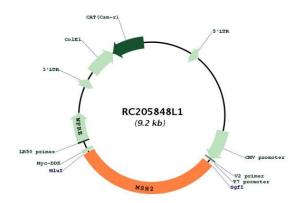
Gene Summary: This locus is frequently mutated in hereditary nonpolyposis colon cancer (HNPCC). When

cloned, it was discovered to be a human homolog of the E. coli mismatch repair gene mutS, consistent with the characteristic alterations in microsatellite sequences (RER+ phenotype) found in HNPCC. Two transcript variants encoding different isoforms have been found for this

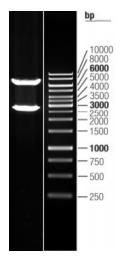
gene. [provided by RefSeq, Apr 2012]



Product images:



Circular map for RC205848L1



Double digestion of RC205848L1 using Sgfl and Mlul $\,$