

Product datasheet for MR211593L3

Helb (NM_080446) Mouse Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Helb (NM_080446) Mouse Tagged Lenti ORF Clone

Tag: Myc-DDK

Symbol: Helb

Synonyms: Al447783; D10Ertd664e

Mammalian Cell Puromycin

Selection:

Vector: pLenti-C-Myc-DDK-P2A-Puro (PS100092)

E. coli Selection: Chloramphenicol (34 ug/mL)

ORF Nucleotide The ORF insert of this clo

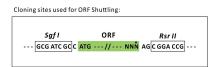
Sequence:

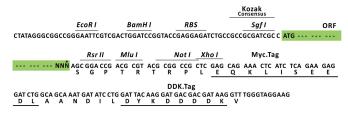
The ORF insert of this clone is exactly the same as(MR211593).

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Restriction Sites: Sgfl-Rsrll

Cloning Scheme:





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

ACCN: NM_080446

ORF Size: 3222 bp



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Helb (NM_080446) Mouse Tagged Lenti ORF Clone - MR211593L3

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 080446.2</u>, <u>NP 536694.2</u>

 RefSeq Size:
 4540 bp

 RefSeq ORF:
 3225 bp

 Locus ID:
 117599

 UniProt ID:
 Q6NVF4

Cytogenetics: 10 67.94 cM

Gene Summary: 5'-3' DNA helicase involved in DNA damage response by acting as an inhibitor of DNA end

resection (PubMed:26774285). Recruitment to single-stranded DNA (ssDNA) following DNA damage leads to inhibit the nucleases catalyzing resection, such as EXO1, BLM and DNA2, possibly via the 5'-3' ssDNA translocase activity of HELB (PubMed:26774285). As cells approach S phase, DNA end resection is promoted by the nuclear export of HELB following phosphorylation (PubMed:26774285). Acts independently of TP53BP1 (PubMed:26774285). Unwinds duplex DNA with 5'-3' polarity. Has single-strand DNA-dependent ATPase and DNA

helicase activities. Prefers ATP and dATP as substrates. During S phase, may facilitate cellular recovery from replication stress (PubMed:11557815, PubMed:7596831, PubMed:7794903).

[UniProtKB/Swiss-Prot Function]