

Product datasheet for RC204296L1

KLHL22 (NM_032775) Human Tagged Lenti ORF Clone

Product data:

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| Product Type: | Expression Plasmids |
| Product Name: | KLHL22 (NM_032775) Human Tagged Lenti ORF Clone |
| Tag: | Myc-DDK |
| Symbol: | KLHL22 |
| Synonyms: | KELCHL |
| Mammalian Cell Selection: | None |
| Vector: | pLenti-C-Myc-DDK (PS100064) |
| E. coli Selection: | Chloramphenicol (34 ug/mL) |
| ORF Nucleotide Sequence: | The ORF insert of this clone is exactly the same as(RC204296). |
| Restriction Sites: | SgfI-MluI |
| Cloning Scheme: | |

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF.

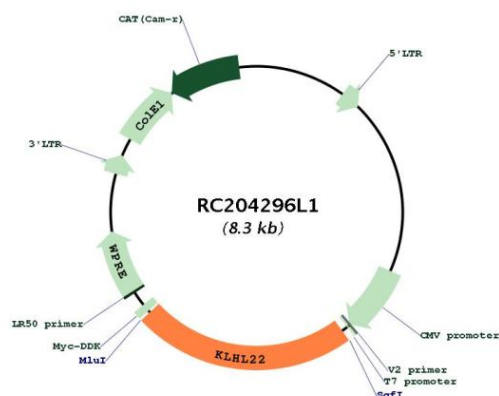
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| ACCN: | NM_032775 |
| ORF Size: | 1902 bp |



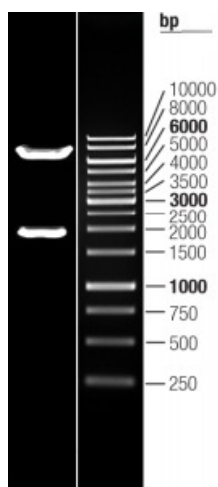
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| OTI Disclaimer: | The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), 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: | <ol style="list-style-type: none"> 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: | NM_032775.2 |
| RefSeq Size: | 2637 bp |
| RefSeq ORF: | 1905 bp |
| Locus ID: | 84861 |
| UniProt ID: | Q53GT1 |
| Cytogenetics: | 22q11.21 |
| Domains: | BTB, Kelch |
| MW: | 71.7 kDa |
| Gene Summary: | Substrate-specific adapter of a BCR (BTB-CUL3-RBX1) E3 ubiquitin ligase complex required for chromosome alignment and localization of PLK1 at kinetochores. The BCR(KLHL22) ubiquitin ligase complex mediates monoubiquitination of PLK1, leading to PLK1 dissociation from phosphoreceptor proteins and subsequent removal from kinetochores, allowing silencing of the spindle assembly checkpoint (SAC) and chromosome segregation. Monoubiquitination of PLK1 does not lead to PLK1 degradation (PubMed:19995937, PubMed:23455478). The BCR(KLHL22) ubiquitin ligase complex is also responsible for the amino acid-stimulated 'Lys-48' polyubiquitination and proteasomal degradation of DEPDC5. Through the degradation of DEPDC5, releases the GATOR1 complex-mediated inhibition of the TORC1 pathway. It is therefore an amino acid-dependent activator within the amino acid-sensing branch of the TORC1 pathway, indirectly regulating different cellular processes including cell growth and autophagy (PubMed:29769719).[UniProtKB/Swiss-Prot Function] |

Product images:



Circular map for RC204296L1



Double digestion of RC204296L1 using SgfI and MluI