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## Product datasheet for RC200245L3

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## 14-3-3 epsilon (YWHAE) (NM_006761) Human Tagged Lenti ORF Clone

## Product data:

Product Type:
Product Name:
Tag:
Symbol:
Synonyms:
Mammalian Cell
Selection:
Vector:
E. coli Selection:

ORF Nucleotide
Sequence:
Restriction Sites:
Cloning Scheme:

Expression Plasmids
14-3-3 epsilon (YWHAE) (NM_006761) Human Tagged Lenti ORF Clone
Myc-DDK
14-3-3 epsilon
14-3-3E; HEL2; KCIP-1; MDCR; MDS
Puromycin
pLenti-C-Myc-DDK-P2A-Puro (PS100092)
Chloramphenicol ( $34 \mathrm{ug} / \mathrm{mL}$ )
The ORF insert of this clone is exactly the same as(RC200245).

Sgfl-Mlul

Cloning sites used for ORF Shuttling:


| EcoR I | BamH I |  | RBS |  |  |  | Kozak Consensus |  |  |  |  |  | ORF |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Sgf I |  |  |  |  |  |  |
| CTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGC C ATG .... ... .... |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Mlu 1 |  |  |  |  | Not 1 |  | Xhol |  | Myc.Tag |  |  |  |  |  |  |
| .... ... NNN* | $\overline{\mathrm{ACG}}$ | $\underset{R}{\text { CGT }} \underset{T}{A C G}$ | $\underset{R}{\mathrm{CGG}}$ | $\mathrm{G} \underset{\mathrm{P}}{\mathrm{CCG}}$ | $\overline{\mathrm{L}} \mathrm{C}$ | $\underset{E}{\text { GAG }}$ | ${ }_{\text {CAG }}$ | AAA | A CTC | ATC | TCA | GAA | $\underset{\text { GAG }}{\text { G }}$ |

GAT CTG GCA GCA AAT GAT ATC CTG GAT TAC AAG GAT GAC GAC GAT AAG GTT TGGGTAGGAAG


* The last codon before the Stop codon of the ORF.
ACCN:
ORF Size:
NM_006761
765 bp

OTI Disclaimer:

OTI Annotation:

Components:

Reconstitution Method:

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 $5,000 \times \mathrm{xg}$ for 5 min . <br> 2. Carefully open the tube and add 100 ul of sterile water to dissolve the DNA. <br> 3. Close the tube and incubate for 10 minutes at room temperature. <br> 4. Briefly vortex the tube and then do a quick spin (less than 5000 xg ) to concentrate the liquid at the bottom. <br> 5. Store the suspended plasmid at $-20^{\circ} \mathrm{C}$. The DNA is stable for at least one year from date of shipping when stored at $-20^{\circ} \mathrm{C}$. |
| RefSeq: | NM 006761.3 |
| RefSeq Size: | 1827 bp |
| RefSeq ORF: | 768 bp |
| Locus ID: | 7531 |
| UniProt ID: | P62258 |
| Cytogenetics: | 17p13.3 |
| Domains: | 14-3-3 |
| Protein Families: | Druggable Genome |
| Protein Pathways: | Cell cycle, Neurotrophin signaling pathway, Oocyte meiosis |
| MW: | 29.2 kDa |
| Gene Summary: | This gene product belongs to the 14-3-3 family of proteins which mediate signal transduction by binding to phosphoserine-containing proteins. This highly conserved protein family is found in both plants and mammals, and this protein is $100 \%$ identical to the mouse ortholog. It interacts with CDC25 phosphatases, RAF1 and IRS1 proteins, suggesting its role in diverse biochemical activities related to signal transduction, such as cell division and regulation of insulin sensitivity. It has also been implicated in the pathogenesis of small cell lung cancer. Two transcript variants, one protein-coding and the other non-protein-coding, have been found for this gene. [provided by RefSeq, Aug 2008] |

## Product images:



Double digestion of RC200245L3 using Sgfl and Mlul

