

Product datasheet for RC200464L3

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

Hexokinase 1 (HK1) (NM 000188) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Hexokinase 1 (HK1) (NM 000188) Human Tagged Lenti ORF Clone

Tag: Myc-DDK

Symbol: Hexokinase 1

Synonyms: hexokinase; HK; HK1-ta; HK1-tb; HK1-tc; HKD; HKI; HMSNR; HXK1; NEDVIBA; RP79

Mammalian Cell

Selection:

Puromycin

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

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

ORF Nucleotide

Sequence:

The ORF insert of this clone is exactly the same as(RC200464).

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





 $[\]ensuremath{^*}$ The last codon before the Stop codon of the ORF.

ACCN: NM_000188

ORF Size: 2751 bp





Hexokinase 1 (HK1) (NM_000188) Human Tagged Lenti ORF Clone - RC200464L3

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 000188.1</u>

 RefSeq Size:
 3580 bp

 RefSeq ORF:
 2754 bp

 Locus ID:
 3098

 UniProt ID:
 P19367

Cytogenetics: 10q22.1

Domains: hexokinase

Protein Families: Druggable Genome

Protein Pathways: Amino sugar and nucleotide sugar metabolism, Fructose and mannose metabolism,

Galactose metabolism, Glycolysis / Gluconeogenesis, Insulin signaling pathway, Metabolic

pathways, Starch and sucrose metabolism, Type II diabetes mellitus

MW: 102.3 kDa

Gene Summary: Hexokinases phosphorylate glucose to produce glucose-6-phosphate, the first step in most

glucose metabolism pathways. This gene encodes a ubiquitous form of hexokinase which localizes to the outer membrane of mitochondria. Mutations in this gene have been associated with hemolytic anemia due to hexokinase deficiency. Alternative splicing of this gene results in several transcript variants which encode different isoforms, some of which are

tissue-specific. [provided by RefSeq, Apr 2016]