

Product datasheet for RC215130L1

OriGene Technologies, Inc.

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Adenylate Kinase 1 (AK1) (NM_000476) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Adenylate Kinase 1 (AK1) (NM_000476) Human Tagged Lenti ORF Clone

Tag: Myc-DDK

Symbol: Adenylate Kinase 1

Synonyms: HTL-S-58j

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(RC215130).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





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

ACCN: NM_000476

ORF Size: 582 bp





Adenylate Kinase 1 (AK1) (NM_000476) Human Tagged Lenti ORF Clone - RC215130L1

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 000476.1</u>

 RefSeq Size:
 2271 bp

 RefSeq ORF:
 585 bp

 Locus ID:
 203

 UniProt ID:
 P00568

Cytogenetics: 9q34.11

Domains: ADK

Protein Families: Druggable Genome

Protein Pathways: Metabolic pathways, Purine metabolism

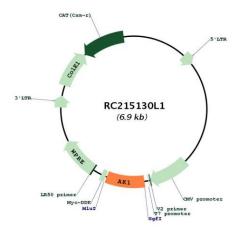
MW: 21.5 kDa

Gene Summary: This gene encodes an adenylate kinase enzyme involved in energy metabolism and

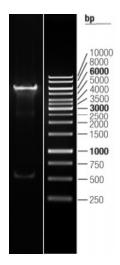
homeostasis of cellular adenine nucleotide ratios in different intracellular compartments. This gene is highly expressed in skeletal muscle, brain and erythrocytes. Certain mutations in this gene resulting in a functionally inadequate enzyme are associated with a rare genetic disorder causing nonspherocytic hemolytic anemia. Alternative splicing of this gene results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Dec 2015]



Product images:



Circular map for RC215130L1



Double digestion of RC215130L1 using Sgfl and Mlul $\,$