

Product datasheet for SC331912

OriGene Technologies, Inc.

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CARKD (NAXD) (NM_001242883) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: CARKD (NAXD) (NM_001242883) Human Untagged Clone

Tag: Tag Free
Symbol: CARKD

Synonyms: CARKD; LP3298; PEBEL2

Vector: pCMV6-Entry (PS100001)

Fully Sequenced ORF: >SC331912 representing NM_001242883.

Blue=Insert sequence Red=Cloning site Green=Tag(s)

ATGCTGCCCGATGGCCCTGGGTCCTCGCTGTGGGGCAATCCGGGCTTGCAGACGACTGACAGCCCCAAT GCTGTTCATGAGGTGGAGAAGTGGCCCCGGCTGCATGCTCTTGTCGTAGGACCTGCCTTGGGTAGA GATGATGCCGTTCTCAGAAAATGTCCAGGGCATTTTGGAAGTGTCAAAGGCCAGGGACATCCCTGTTGTC ATCGACGCGGATGGCCTGTGGCTCGCTCAGCAGCCGGCCCTCATCCATGGCTACCGGAAGGCTGTG CTCACTCCCAACCACGTGGAGTTCAGCAGACTGTATGACGCTGTGCTCAGAGGCCCTATGGACAGCGAT GACAGCCATGGATCTGTGCTAAGACTCAGCCAAGCCCTGGGCAACGTGACGGTGGTCCAGAAAGGAGAG CGCGACATCCTCTCCAACGGCCAGCAGGTGTTTGTGTGCAGCCAGGAAGGCAGCCGCAGGTGTGGA GGGCAAGGGGACCTCCTGTCGGGCTCCCTGGGCGTCCTGGTACACTGGGCGCTCCTTGCTGGACCACAG AAAACAAATGGGTCCAGCCCTCCTCCTGGTGGCCGCGTTTTGGCGCCTCTTCTCACCAGGCAGTGCAAC CACCAAGCCTTCCAGAAAGCACGGTCGCTCCCACCACCACCTCCCGACATGATCGCCGAGGTGGGGCCCCCC

TTCAGCAAGCTCTTTGAAACC<mark>TGA</mark>

Restriction Sites: Sgfl-Mlul

ACCN: NM 001242883

Insert Size: 714 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a

point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).

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 001242883.1</u>

 RefSeq Size:
 2331 bp

 RefSeq ORF:
 714 bp

 Locus ID:
 55739

 UniProt ID:
 Q8IW45

 Cytogenetics:
 13q34

Protein Families: Transmembrane

MW: 25.2 kDa

Gene Summary: Catalyzes the dehydration of the S-form of NAD(P)HX at the expense of ATP, which is

converted to ADP. Together with NAD(P)HX epimerase, which catalyzes the epimerization of the S- and R-forms, the enzyme allows the repair of both epimers of NAD(P)HX, a damaged form of NAD(P)H that is a result of enzymatic or heat-dependent hydration.[UniProtKB/Swiss-

Prot Function]

Transcript Variant: This variant (4) differs in the 5' UTR and 5' coding region, uses an alternate start codon, and uses an alternate splice site that causes a frameshift in the 3' coding region, compared to variant 1. The encoded isoform (d) has distinct N- and C-termini and is shorter

than isoform a.