

Product datasheet for **RC236451**

DHRS4 (NM_001282989) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: DHRS4 (NM_001282989) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: DHRS4
Synonyms: CR; NRDR; PHCR; PSCD; SCAD-SRL; SDR-SRL; SDR25C1; SDR25C2
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >RC236451 representing NM_001282989
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**GCGATCGCC**

ATGCACAAGGCGGGCTGCTAGGCCTCTGTGCCGGGCTTGAATTCGGTGCGGATGGCCAGCTCCGGGA
TGACCCCGCGGGACCCGCTCGCAAATAAGGTGGCCCTGGTAACGGCCTCCACCGACGGGATCGGCTTCGC
CATCGCCCGGCGTTTGGCCAGGACGGGGCCCATGTGGTCGTGACGAGCCGGAAGCAGCAGAATGTGGAC
CAGGCGGTGGCCACGCTGCAGGGGGAGGGGCTGAGCGTGACGGGCACCGTGTGCCATGTGGGAAGGCGG
AGGACCGGGAGCGGCTGGTGGCCACGGCTGTGAAGCTTCATGGAGGTATCGATATCCTAGTCTCCAATGC
TGCTGTCAACCTTTCTTTGGAAGCATAATGGATGTCCTGAGGAGGTGTGGACAAGCTCTGGATGGAC
AAGGAAAAGAGGAAAGCATGAAAGAAACCTGCGGATAAGAAGTTAGGCGAGCCAGAGGATTGTGCTG
GCATCGTGTCTTCTCCTGTGCTCTGAAGATGCCAGCTACATCACTGGGAAACAGTGGTGGTGGTGGAGG
AACCCCGTCCCGCCTC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC236451 representing NM_001282989
Red=Cloning site Green=Tags(s)

MHKAGLLGLCARAWNSVRMASSGMTRRDPLANKVALVASTDGIGFAIARRLAQDGAHVVVSSRKQQNVD
QAVATLQGEGLSVTGTVCHVGKAEDRERLVATAVKLHGGIDILVSNAAVNPFPGSIMDVTEEVWDLWMD
KEKEESMKETLRIRRLGEPEDCAGIVSFLCSEDASYITGETVVVGGGTPSRL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

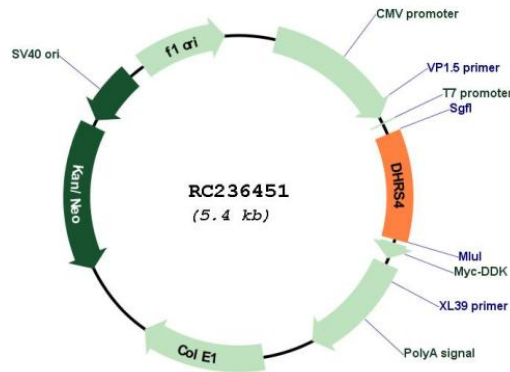


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Cloning Scheme:



Plasmid Map:



ACCN: NM_001282989

ORF Size: 576 bp

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: [NM_001282989.2](#)

RefSeq Size: 1057 bp

RefSeq ORF: 579 bp

Locus ID: 10901

UniProt ID: [Q9BTZ2](#)

Cytogenetics: 14q11.2

Protein Families: Druggable Genome

Protein Pathways: Metabolic pathways, Retinol metabolism

MW: 21 kDa

Gene Summary: Reduces all-trans-retinal and 9-cis retinal. Can also catalyze the oxidation of all-trans-retinol with NADP as co-factor, but with much lower efficiency. Reduces alkyl phenyl ketones and alpha-dicarbonyl compounds with aromatic rings, such as pyrimidine-4-aldehyde, 3-benzoylpyridine, 4-benzoylpyridine, menadione and 4-hexanoylpyridine. Has no activity towards aliphatic aldehydes and ketones (By similarity).[UniProtKB/Swiss-Prot Function]