

Product datasheet for RC209971

ZADH2 (NM_175907) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ZADH2 (NM_175907) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ZADH2
Synonyms:	PRG-3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC209971 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCTGCGGCTGGTGCCACCGGGCCCGGCCATCGTGGACATGTCGTACGCCGCCACTTCTGGACT
TCCAGGGCTCCGCCATCCCAAGCCATGCAGAAGCTGGTGGTACCCGGCTGAGCCCAACTTCCGCGA
GGCCGTACCCCTGAGCCGGGACTGCCCGTGCCGCTCCCGGGGACGGAGACCTCCTCGTCCGGAACCGA
TTTGTGGTGTAAATGCATCTGACATCAACTATTCAGCAGGCCGCTATGACCCCTCAGTTAAGCCTCCCT
TTGACATAGGTTTGAAGCATTGGGGAGGTGGTGGCCCTAGGCCTCTCTGCTAGTGCCAGATACACAGT
TGGCCAAGCTGTGGCTTACATGGCACCTGGTTCTTTTGCTGAGTACACAGTTGTGCTGCCAGCATTGCA
ACTCCAGTGCCCTCAGTAAACCCGAGTATCTTACCCTGCTGTTAAGTGGCACCACCGCATAACATCAGCC
TGAAAGAGCTCGGAGGACTGTGCGAAGGGAAAAAGTTTTGGTGACAGCAGCAGCTGGGGAAACGGGCCA
GTTTGCCATGCAGCTTCAAAGAAGGCAAAGTGCCATGTAATTGGAACCTGCTCTTCTGATGAAAAGTCT
GCTTTTCTGAAATCTCTGGCTGTGATCGTCTATCAACTATAAACTGAACCCGTAGGTACCGTCTTA
AGCAGGAGTACCCTGAAGGTGTCGATGTGGTCTATGAATCTGTTGGGGAGCCATGTTTGACTTGGCTGT
AGACGCCCTGGCTACGAAAGGGCGCTTGATAGTAATAGGGTTTATCTCTGGCTACCAAACCTCTACTGCC
CTTTCGCTGTGAAAGCAGGAACATTGCCAGCCAACTGCTCAAGAAATCTGCCAGCGTACAGGGCTTCT
TCCTGAACCATTACCTTTCTAAGTATCAAGCAGCCATGAGCCACTTGTCTGAGATGTGTGTGAGCGGAGA
CCTGTTTTGTGAGGTGGACCTTGAGATCTGTCTCCAGAGGGCAGGTTTACTGGCCTGGAGTCCATATTC
CGTGCTGTCAATTATGTACATGGGAAAAAACTGGAAAAATGTAGTTGAATTACCTACTCTGTCA
ACAGTAAGCTG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC209971 protein sequence
 Red=Cloning site Green=Tags(s)

MLRLVPTGARAI VDSYARHFLDFQGS AIPQAMQKLVVTRLSPNFREAVTL SRDCPVPLPGDGDLLVRNR
 FVGVNASDINYSAGRYDPSVKPPFDIGFEGIGEVALGLSASARYTVGQAVAYMAPGSFAEYTVVPASIA
 TPVPSVKPEYL TLLVSGTTAYISLKEGGLSEGKKVLVTAAGGTGQFAMQLSKKAKCHVIGTCSSDEKS
 AFLKSLGCDRPI NYKTEPVGTVLKQ EYPEGVDVVYESVGGAMFDLAVDALATKGRLIVIGFISGYQTPTG
 LSPVKAGTLP AKLLKKSASVQGF LNHYLSKYQAAMSHLLEMCVSGDLVCEVDLGDLSPEGRFTGLIESIF
 RAVNYMYMGKNTGKIVVELPHSVNSKL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6363_h06.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_175907

ORF Size: 1131 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_175907.3](#), [NP_787103.1](#)

RefSeq Size: 5495 bp

RefSeq ORF: 1134 bp

Locus ID: 284273

UniProt ID: [Q8N4Q0](#)

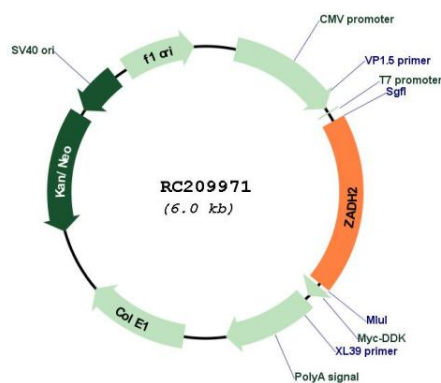
Cytogenetics: 18q22.3

Protein Families: Druggable Genome

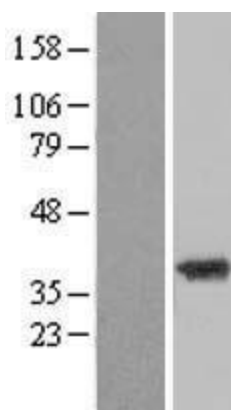
MW: 40.1 kDa

Gene Summary: Functions as 15-oxo-prostaglandin 13-reductase and acts on 15-keto-PGE1, 15-keto-PGE2, 15-keto-PGE1-alpha and 15-keto-PGE2-alpha with highest efficiency towards 15-keto-PGE2-alpha. Overexpression represses transcriptional activity of PPARG and inhibits adipocyte differentiation.[UniProtKB/Swiss-Prot Function]

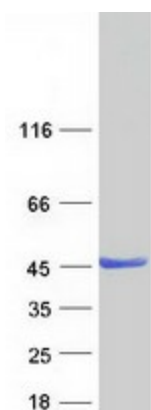
Product images:



Circular map for RC209971



Western blot validation of overexpression lysate (Cat# [LY406204]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC209971 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ZADH2 protein (Cat# [TP309971]). The protein was produced from HEK293T cells transfected with ZADH2 cDNA clone (Cat# RC209971) using MegaTran 2.0 (Cat# [TT210002]).