

Product datasheet for **RG207534**

TGDS (NM_014305) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TGDS (NM_014305) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	TGDS
Synonyms:	CATMANS; SDR2E1; TDPGD
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG207534 representing NM_014305 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTCGGCGCGGTGTTGGGAGGAACCGTGGGTCTTCCCGCGGCTTTGCGAAGCGGGTCTGGTGACCG
GCGGTGCTGGTTTCATTGCATCACATATGATTGTCTCTTAGTGGAAGATTATCCAACTATATGATCAT
AAATCTAGACAAGCTGGATTACTGTGCAAGCTTGAAGAATCTTGAACCATTTCTAACAAACAGAACTAC
AAATTTATACAGGGTGACATATGTGATTCTCACCTTGTGAACTGCTTTTGAACAGAGAAAATAGATA
TAGTACTACATTTGCCGCACAAACACATGTAGATCTTTCATTTCGTACGTGCCTTTGAGTTACCTATGT
TAATGTTTATGGCACTCACGTTTTGGTAAGTGTGCTCATGAAGCCAGAGTGGAGAAGTTTATTTATGTC
AGCACAGATGAAGTATATGGTGGCAGTCTTGATAAGGAATTTGATGAATCTTCACCCAAACAACCTACAA
ATCCTTATGCATCATCTAAAGCAGCTGTGAATGTTTTGTACAGTCTTACTGGGAACAATAAAGTTTCC
AGTTGTCATCACAGAAGCAGTAATGTTTATGGACCACATCAATATCCAGAAAAGTTTATCCAAAATTT
ATATCTTTGCTACAGCACAAACAGGAAATGTTGCATTTCATGGGTGAGGCTTCAAACAAGAAACTTCTTT
ATGCTACTGATGTTGTAGAAGCATTCTCACTGTCTCAAAAAAGGAAACCAGGTGAAATTTATAACAT
CGGAACCAATTTTGAATGTCAGTTGTCCAGCTTGCCAAAGAATAACAACATGACATGACATACCCAA
TCAGAGCTGAAATGAAAATTGGTTGATTATGTTAATGATAGCCACCAATGACATGACATACCCAA
TGAAGTCAGAAAAATACATGGCTTAGGATGGAGACCTAAAGTGCCTTGAAAGAAGGAATAAAGAAAA
AATTGAATGTTACAGAGAGAATTTCACTGGAAGAATGTGAAAAGGCATTAGAACCCTTTCCGGTA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



[View online »](#)

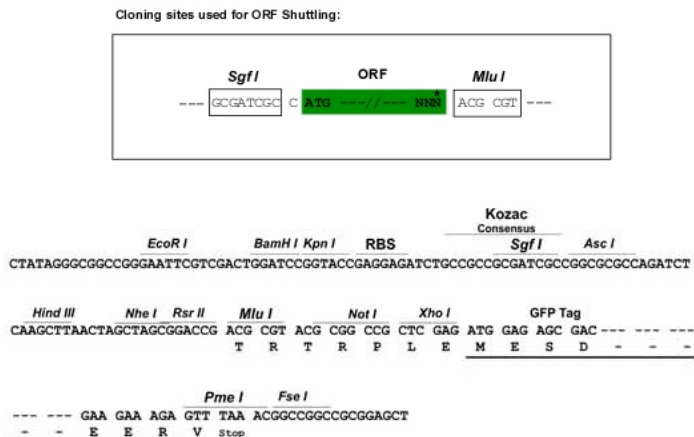
Protein Sequence: >RG207534 representing NM_014305
 Red=Cloning site Green=Tags(s)

MSAACWEPEWGLPGGFAKRVLVTGGAGFIASHMIVSLVEDYPNYMIINLDKLDYCASLKNLETISNKQNY
 KFIQGDICDSHFVKLLFETEKIDIVLHFAAQTHVDLSFVRAFEFTYVNVYGTHVLVSAAEARVEKFIYV
 STDEVYGGSLDKFEDESSPKQPTNPYASSKAAAECFVQSYWEQYKFPVVI TRSSNVYGPHQYPEKVIPKF
 ISLLQHNRKCCIHGSQLQTRNFLYATDVVEAFLTVLKKGKPGEIYNI GTNFEMSVVQLAKELIQLIKETN
 SESEMENWVDYVNDRPTNDMRYPMKSEKIHGLGWRPKVPWKEGIKKTIEWYRENFHNWKNVEKALEPFPV

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_014305

ORF Size: 1050 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_014305.4](#)

RefSeq Size: 1952 bp

RefSeq ORF: 1053 bp

Locus ID: 23483

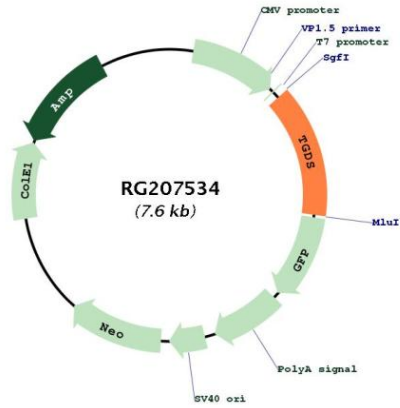
UniProt ID: [O95455](#)

Cytogenetics: 13q32.1

Domains: Epimerase

Gene Summary: The protein encoded by this gene is a member of the short-chain dehydrogenases/reductases (SDR) superfamily, and is thought to contain a nicotinamide adenine dinucleotide (NAD) binding domain. This large SDR family of enzymes is involved in the metabolism of a variety of compounds, including prostaglandins, retinoids, lipids, steroid hormones, and xenobiotics. Mutations in this gene have been associated with Catel-Manzke syndrome, which is characterized by Pierre Robin sequence, and radial deviation of the index finger due to the presence of an accessory bone between the index finger and its proximal phalanx. Pierre Robin sequence is defined by an undersized jaw, backwards displacement of the tongue base that causes an obstruction of the airways, and can also be associated with a cleft palate. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jan 2015]

Product images:



Circular map for RG207534