

Product datasheet for **RG232535**

GMDS (NM_001253846) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GMDS (NM_001253846) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	GMDS
Synonyms:	GMD; SDR3E1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG232535 representing NM_001253846 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTGTA AAAATGGATGGTTCCTACCTGGCTGAGTTCCTGCTGGAGAAAGGCTATGAGGTCCATGGAATTG
TACGGCGGTCCAGTTCATTTAATACGGGTGCAATTGAGCATCTGTATAAGAATCCCAGGCTCACATTGA
AGGAAACATGAAGTTGCACTATGGCGATCTCACTGACAGTACCTGCCTTGTGAAGATCATAATGAAGTA
AAGCCACAGAGATCTACAACCTTGGAGCCAGAGCCACGTCAAATTTCTTTGACCTCGCTGAGTACA
CTGCGGACGTTGACGGAGTTGGCACTCTACGACTTCTAGATGCAGTTAAGACTTGTGGCCTTATCAACTC
TGTGAAGTTCTACCAAGCCTCAACAAGTGAACCTTATGGGAAAGTGCAGGAAATACCCAGAGGAGACC
ACCCCTTTCTATCCCGGTCACCCATATGGGGCAGCAAACTCTATGCCTATTGGATTGTGGTGAACCTCC
GTGAGGCGTATAATCTCTTTGCACTGACGGCATTCTCTTCAATCATGAGAGTCCAGAGAGGAGCTAA
TTTCGTTACTCGAAAAATTAGCCGGTCAGTAGCTAAGATTTACCTTGGACAACCTGGAATGTTTCAGTTTG
GGAAATCTGGATGCCAACGAGATTGGGGCCATGCCAAGGACTATGTGGAGGCTATGTGGTTGATGTTGC
AGAATGATGAGCCGAGGACTTCGTTATAGCTACTGGGAGGTCCATAGTGTCCGGGAATTTGTCGAGAA
ATCATTCTGCACATTGGAAAAACCATTTGTGTGGGAAGGAAAGAAATGAAAATGAAGTGGCAGATGTAAA
GAGACCCGCAAAGTTCACGTGACTGTGGATCTCAAGTACTACCGGCAACTGAAGTGGACTTTCTGCAGG
GCGACTGCACAAAGCGAAACAGAAGCTGAAGTGAAGCCCGGGTCGCTTTCGATGAGCTGGTGAGGGA
GATGGTGACGCCGACGTGGAGCTCATGAGGACAAACCCCAATGCC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG232535 representing NM_001253846
Red=Cloning site Green=Tags(s)

MCKMDGSYLAEFLLKGYEVHGI VRRSSSFNTGRIEHL YKNPQAHIEGNMKLHYGDLTDSTCLVKIINEV
 KPTEIYNLGAQSHVKISFDLAEYADVDGVTLRLLDAVKT CGLINSVKFYQASTSELYGKVQEI PQKET
 TPFYPRSPYGAAKLYAYIWVNFREAYNLF AVNGILFNHESPRRGANFVTRKISRVAKIYLGQLECFSL
 GNLDAKRDWGHAKDYVEAMWMLQNDEPEDFVIATGEVHSVREFVEKSF LHI GKTIVWEGKNENEVGRCK
 ETGKVHVTVDLKYRPTVEVDFLQGDCTKAKQKLNWKPRVAFDELVREMVHADVELMRTNPNA

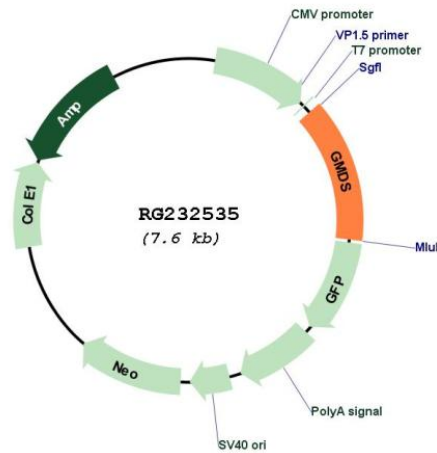
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001253846

ORF Size: 1026 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:	<ol style="list-style-type: none">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_001253846.1 , NP_001240775.1
RefSeq Size:	1446 bp
RefSeq ORF:	1029 bp
Locus ID:	2762
UniProt ID:	O60547
Cytogenetics:	6p25.3
Protein Families:	Druggable Genome
Protein Pathways:	Amino sugar and nucleotide sugar metabolism, Fructose and mannose metabolism, Metabolic pathways
Gene Summary:	GDP-mannose 4,6-dehydratase (GMD; EC 4.2.1.47) catalyzes the conversion of GDP-mannose to GDP-4-keto-6-deoxymannose, the first step in the synthesis of GDP-fucose from GDP-mannose, using NADP+ as a cofactor. The second and third steps of the pathway are catalyzed by a single enzyme, GDP-keto-6-deoxymannose 3,5-epimerase, 4-reductase, designated FX in humans (MIM 137020).[supplied by OMIM, Aug 2009]