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Product datasheet for RG231133

AKR1D1 (NM_001190907) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	AKR1D1 (NM_001190907) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	AKR1D1
Synonyms:	3o5bred; CBAS2; SRD5B1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>RG231133 representing NM_001190907
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGATCTCAGTGCTGCAAGTCACCGCATACCTCTAAGTGATGGAAACAGCATTCCCATCATCGGACTTG
GTACCTACTCAGAACCTAAATCGACCCCTAAGGGAGCCTGTGCAACATCGGTGAAGGTTGCTATTGACAC
AGGGTACCGACATATTGATGGGGCCTACATCTACCAAAATGAACACGAAGTTGGGGAGGCCATCAGGGAG
AAGATAGCAGAAGGAAAGGTGCGGAGGGAAGATATCTTCTACTGTGGAAAGCTATGGGCTACAAATCATG
TCCCAGAGATGGTCCGCCCAACCCTGGAGAGGACACTCAGGGTCCTCCAGCTAGATTATGTGGATCTTTA
CATCATTGAAGTACCCATGGCCTTTAAGCCAGGAGATGAAATATACCCTAGAGATGAGAATGGCAAATGG
TTATATCACAAGTCAAATCTGTGTGCCACTTGGGAGGCGATGGAAGCTTGCAAAGACGCTGGCTTGGTGA
AATCCCTGGGAGTGTCCAATTTTAACCGCAGGCAGCTGGAGCTCATCCTGAACAAGCCAGGACTCAAACA
CAAGCCAGTCAGCAACCAGGTTGAGTGCCATCCGTATTTCACCCAGCCAAAACTCTTGAAATTTTGCCAA
CAACATGACATTGTCATTACTGCATATAGCCCTTTGGGGACCAGTAGGAATCCAATCTGGGTGAATGTTT
CTTCTCCACCTTTGTTAAAGGATGCACTTCTAAACTCATTGGGGAAAAGGTACAATAAGACAGCAGCTCA
AATTGTTTTGCGTTTCAACATCCAGCGAGGGGTGGTTGTCATTCCTAAAAGCTTTAATCTTGAAAGGATC
AAAGAAAATTTTCAGGTGGCGCGATCATCC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

View online »

Protein Sequence:

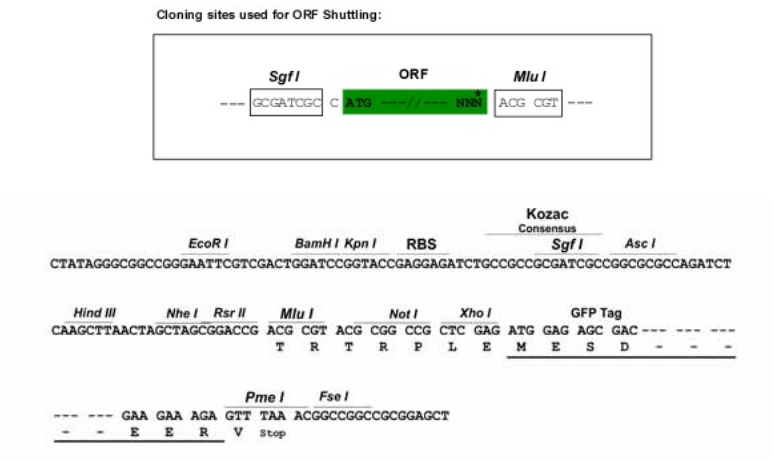
>RG231133 representing NM_001190907
Red=Cloning site Green=Tags(s)

MDLSAASHRIPLSDGNSIPIIGLGTYSEPKSTPKGACATSVKVAIDTGYRHIDGAYIYQNEHEVGEAIRE
KIAEGKVRREDIFYCGKLWATNHVPEMVRPTLERTLRVLQLDYVDLYIIEVPMAFKPGDEIYPRDENGKW
LYHKSNLCATWEAMEACKDAGLVKSLGVSNFNRRQLELILNKPGLKHKPVSNQVECHPYFTQPKLLKFCQ
QHDIVITAYSPLGTSRNPIWVNVSSPPLLKDALLNSLGKRYNKTAAQIVLRFNIQRGVVVIPKSFNLERI
KENFQVARSS

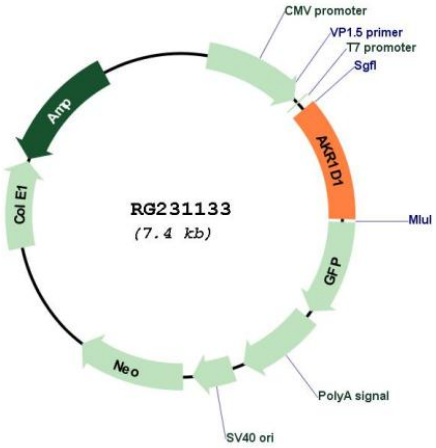
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001190907

ORF Size: 870 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_001190907.2
RefSeq Size:	2627 bp
RefSeq ORF:	873 bp
Locus ID:	6718
UniProt ID:	P51857
Cytogenetics:	7q33
Protein Families:	Druggable Genome
Protein Pathways:	Androgen and estrogen metabolism, C21-Steroid hormone metabolism, Metabolic pathways, Primary bile acid biosynthesis
Gene Summary:	The enzyme encoded by this gene is responsible for the catalysis of the 5-beta-reduction of bile acid intermediates and steroid hormones carrying a delta(4)-3-one structure. Deficiency of this enzyme may contribute to hepatic dysfunction. Three transcript variants encoding different isoforms have been found for this gene. Other variants may be present, but their full-length natures have not been determined yet. [provided by RefSeq, Jul 2010]