

## Product datasheet for RC213538L4

#### OriGene Technologies, Inc.

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### AKR1C2 (NM\_001354) Human Tagged Lenti ORF Clone

**Product data:** 

**Product Type:** Expression Plasmids

Product Name: AKR1C2 (NM\_001354) Human Tagged Lenti ORF Clone

Tag: mGFP Symbol: AKR1C2

Synonyms: AKR1C-pseudo; BABP; DD; DD-2; DD/BABP; DD2; DDH2; HAKRD; HBAB; MCDR2; SRXY8; TDD

Mammalian Cell Puromycin

Selection:

**Vector:** pLenti-C-mGFP-P2A-Puro (PS100093)

E. coli Selection: Chloramphenicol (34 ug/mL)

ORF Nucleotide The ORF insert of this clone is exactly the same as(RC213538).

Sequence:

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:** 





<sup>\*</sup> The last codon before the Stop codon of the ORF

**ACCN:** NM\_001354

ORF Size: 969 bp





#### AKR1C2 (NM\_001354) Human Tagged Lenti ORF Clone - RC213538L4

**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:** <u>NM 001354.4</u>

RefSeq Size: 1663 bp
RefSeq ORF: 972 bp
Locus ID: 1646
UniProt ID: P52895

Cytogenetics: 10p15.1

**Domains:** aldo\_ket\_red

Protein Families: Druggable Genome

**Protein Pathways:** Metabolism of xenobiotics by cytochrome P450

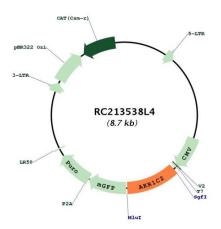
**MW:** 36.6 kDa

**Gene Summary:** This gene encodes a member of the aldo/keto reductase superfamily, which consists of more

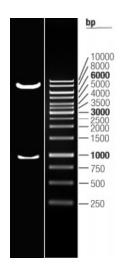
than 40 known enzymes and proteins. These enzymes catalyze the conversion of aldehydes and ketones to their corresponding alcohols using NADH and/or NADPH as cofactors. The enzymes display overlapping but distinct substrate specificity. This enzyme binds bile acid with high affinity, and shows minimal 3-alpha-hydroxysteroid dehydrogenase activity. This gene shares high sequence identity with three other gene members and is clustered with those three genes at chromosome 10p15-p14. Three transcript variants encoding two different isoforms have been found for this gene. [provided by RefSeq, Dec 2011]



# **Product images:**



Circular map for RC213538L4



Double digestion of RC213538L4 using Sgfl and Miul