

## **Product datasheet for RG200210**

## AKR1C3 (NM\_003739) Human Tagged ORF Clone

### **Product data:**

**Product Type:** Expression Plasmids

**Product Name:** AKR1C3 (NM\_003739) Human Tagged ORF Clone

Tag: TurboGFP Symbol: AKR1C3

Synonyms: DD3; DDX; HA1753; HAKRB; HAKRe; hluPGFS; HSD17B5; PGFS

Mammalian Cell Neomycin

Selection:

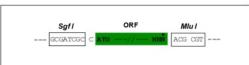
**Vector:** pCMV6-AC-GFP (PS100010)

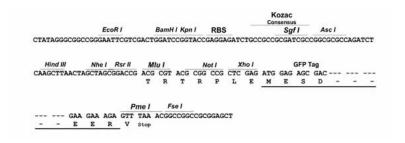
E. coli Selection: Ampicillin (100 ug/mL)

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:** 

Cloning sites used for ORF Shuttling:





**ACCN:** NM\_003739

ORF Size: 969 bp



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#### AKR1C3 (NM\_003739) Human Tagged ORF Clone - RG200210

**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 003739.4, NP 003730.4</u>

RefSeq Size: 1224 bp
RefSeq ORF: 972 bp
Locus ID: 8644
UniProt ID: P42330

Cytogenetics: 10p15.1

**Protein Families:** Druggable Genome

**Protein Pathways:** Arachidonic acid metabolism, Metabolism of xenobiotics by cytochrome P450

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

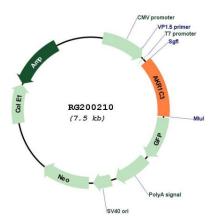
than 40 known enzymes and proteins. These enzymes catalyze the conversion of aldehydes and ketones to their corresponding alcohols by utilizing NADH and/or NADPH as cofactors. The enzymes display overlapping but distinct substrate specificity. This enzyme catalyzes the reduction of prostaglandin (PG) D2, PGH2 and phenanthrenequinone (PQ), and the oxidation of 9alpha,11beta-PGF2 to PGD2. It may play an important role in the pathogenesis of allergic

diseases such as asthma, and may also have a role in controlling cell growth and/or

differentiation. 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 different isoforms have been found for this gene. [provided by RefSeq, Dec 2011]



# **Product images:**



Circular map for RG200210