

# **Product datasheet for SC313853**

## OriGene Technologies, Inc.

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### **ADCY5 (AK093840) Human Untagged Clone**

#### **Product data:**

**Product Type:** Expression Plasmids

**Product Name:** ADCY5 (AK093840) Human Untagged Clone

Tag: Tag Free Symbol: ADCY5

Synonyms: AC5; FDFM

**Vector:** <u>pCMV6 series</u>

Fully Sequenced ORF: >NCBI ORF sequence for AK093840, the custom clone sequence may differ by one or more

nucleotides

**Restriction Sites:** Please inquire

**ACCN:** AK093840

**OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a

point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning

into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

**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>AK093840.1</u>, <u>BAG52770.1</u>

RefSeq Size: 2554 bp





#### ADCY5 (AK093840) Human Untagged Clone - SC313853

RefSeq ORF: 1578 bp

Locus ID: 111

Cytogenetics: 3q21.1

Domains: CYCc

**Protein Families:** Druggable Genome, Transmembrane

**Protein Pathways:** Chemokine signaling pathway, Dilated cardiomyopathy, Gap junction, GnRH signaling

pathway, Melanogenesis, Oocyte meiosis, Progesterone-mediated oocyte maturation, Purine

metabolism, Vascular smooth muscle contraction

**Gene Summary:** This gene encodes a member of the membrane-bound adenylyl cyclase enzymes. Adenylyl

cyclases mediate G protein-coupled receptor signaling through the synthesis of the second messenger cAMP. Activity of the encoded protein is stimulated by the Gs alpha subunit of G protein-coupled receptors and is inhibited by protein kinase A, calcium and Gi alpha subunits. Single nucleotide polymorphisms in this gene may be associated with low birth weight and type 2 diabetes. Alternatively spliced transcript variants that encode different isoforms have

been observed for this gene. [provided by RefSeq, Dec 2010]