

# **Product datasheet for TL306820**

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OriGene Technologies, Inc.

## **ADCY6 Human shRNA Plasmid Kit (Locus ID 112)**

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** ADCY6 Human shRNA Plasmid Kit (Locus ID 112)

Locus ID: 112

Synonyms: AC6; LCCS8

Vector: pGFP-C-shLenti (TR30023)

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

**Mammalian Cell** 

Puromycin

Selection:

Format: Lentiviral plasmids

**Components:** ADCY6 - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 112).

5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.

RefSeq: NM 015270, NM 020983, NM 015270.1, NM 015270.2, NM 015270.3, NM 015270.4,

NM 020983.1, NM 020983.2, BC064923, NM 015270.5

UniProt ID: 043306

**Summary:** This gene encodes a member of the adenylyl cyclase family of proteins, which are required

for the synthesis of cyclic AMP. All members of this family have an intracellular N-terminus, a tandem repeat of six transmembrane domains separated by a cytoplasmic loop, and a C-terminal cytoplasmic domain. The two cytoplasmic regions bind ATP and form the catalytic core of the protein. Adenylyl cyclases are important effectors of transmembrane signaling pathways and are regulated by the activity of G protein coupled receptor signaling. This protein belongs to a small subclass of adenylyl cyclase proteins that are functionally related and are inhibited by protein kinase A, calcium ions and nitric oxide. A mutation in this gene is

associated with arthrogryposis multiplex congenita. [provided by RefSeq, May 2015]

**shRNA Design:** These shRNA constructs were designed against multiple splice variants at this gene locus. To

be certain that your variant of interest is targeted, please contact <u>techsupport@origene.com</u>. If you need a special design or shRNA sequence, please utilize our custom shRNA service.





# Performance Guaranteed:

OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).