

## **Product datasheet for TL316437V**

## OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

## Adducin 2 (ADD2) Human shRNA Lentiviral Particle (Locus ID 119)

**Product data:** 

**Product Type:** shRNA Lentiviral Particles

**Product Name:** Adducin 2 (ADD2) Human shRNA Lentiviral Particle (Locus ID 119)

Locus ID: 119

Synonyms: ADDB

**Vector:** pGFP-C-shLenti (TR30023)

Format: Lentiviral particles

**Components:** ADD2 - Human shRNA lentiviral particles (4 unique 29mer target-specific shRNA, 1 scramble

control), 0.5 ml each, >10^7 TU/ml.

RefSeq: NM 001185054, NM 001185055, NM 001617, NM 017482, NM 017483, NM 017484,

NM 017485, NM 017486, NM 017487, NM 017488, NM 017488.1, NM 017488.2,

NM 017488.3, NM 001617.1, NM 001617.2, NM 001617.3, NM 017482.1, NM 017482.2,

NM 017482.3, NM 001185055.1, NM 001185054.1, NM 017484.1, NM 017483.1, NM 017483.2, NM 017484.2, BC041666, BC041666.1, BC065525, BC008709, BC010237, BC011416, BC027876, BC051882, BC056881, NM 017488.4, NM 001185055.2, NM 001617.4

UniProt ID: P35612

**Summary:** Adducins are heteromeric proteins composed of different subunits referred to as adducin

alpha, beta and gamma. The three subunits are encoded by distinct genes and belong to a family of membrane skeletal proteins involved in the assembly of spectrin-actin network in erythrocytes and at sites of cell-cell contact in epithelial tissues. While adducins alpha and gamma are ubiquitously expressed, the expression of adducin beta is restricted to brain and hematopoietic tissues. Adducin, originally purified from human erythrocytes, was found to be

a heterodimer of adducins alpha and beta. Polymorphisms resulting in amino acid substitutions in these two subunits have been associated with the regulation of blood pressure in an animal model of hypertension. Heterodimers consisting of alpha and gamma subunits have also been described. Structurally, each subunit is comprised of two distinct domains. The amino-terminal region is protease resistant and globular in shape, while the carboxy-terminal region is protease sensitive. The latter contains multiple phosphorylation sites for protein kinase C, the binding site for calmodulin, and is required for association with spectrin and actin. Alternatively spliced transcript variants have been described. [provided by

RefSeq, Jun 2010]





## Adducin 2 (ADD2) Human shRNA Lentiviral Particle (Locus ID 119) - TL316437V

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 <u>custom shRNA service</u>.

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).