

Product datasheet for TL314590

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

OriGene Technologies, Inc.

ATP2B3 Human shRNA Plasmid Kit (Locus ID 492)

Product data:

Product Type: shRNA Plasmids

Product Name: ATP2B3 Human shRNA Plasmid Kit (Locus ID 492)

Locus ID: 492

Synonyms: CFAP39; CLA2; OPCA; PMCA3; PMCA3a; SCAX1

Vector: pGFP-C-shLenti (TR30023)

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

Mammalian Cell Puromycin

Selection:

Format: Lentiviral plasmids

Components: ATP2B3 - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 492).

5µg purified plasmid DNA per construct

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

RefSeq: NM 001001344, NM 021949, NM 001001344.1, NM 001001344.2, NM 021949.1,

NM 021949.2, NM 021949.3, BC047580, BC130009, BM680649, BM695792, BM805938,

BM986989

UniProt ID: Q16720

Summary: The protein encoded by this gene belongs to the family of P-type primary ion transport

ATPases characterized by the formation of an aspartyl phosphate intermediate during the reaction cycle. These enzymes remove bivalent calcium ions from eukaryotic cells against

very large concentration gradients and play a critical role in intracellular calcium

homeostasis. The mammalian plasma membrane calcium ATPase isoforms are encoded by at

least four separate genes and the diversity of these enzymes is further increased by

alternative splicing of transcripts. The expression of different isoforms and splice variants is regulated in a developmental, tissue- and cell type-specific manner, suggesting that these pumps are functionally adapted to the physiological needs of particular cells and tissues. This

gene encodes the plasma membrane calcium ATPase isoform 3. Alternatively spliced

transcript variants encoding different isoforms have been identified. [provided by RefSeq, Jul

2008]







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 techsupport@origene.com. 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).