

## Product datasheet for TL306311

## 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

## **UCMA Human shRNA Plasmid Kit (Locus ID 221044)**

**Product data:** 

**Product Type:** shRNA Plasmids

Product Name: UCMA Human shRNA Plasmid Kit (Locus ID 221044)

**Locus ID:** 221044

Synonyms: C10orf49; GRP; GRP/UCMA

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

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

**Mammalian Cell** 

Selection:

Puromycin

Format: Lentiviral plasmids

**Components:** UCMA - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 221044).

5µg purified plasmid DNA per construct

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

RefSeq: NM 001303118, NM 001303119, NM 145314, NM 145314.1, NM 145314.2, NM 001303119.1,

NM 001303118.1, BC018068, BC018068.1, NM 001303118.2, NM 001303119.2

UniProt ID: O8WVF2

**Summary:** This gene encodes a chondrocyte-specific, highly charged protein that is abundantly

expressed in the upper immature zone of fetal and juvenile epiphyseal cartilage. The encoded protein undergoes proteolytic processing to generate a mature protein that is secreted into the extracellular matrix. The glutamic acid residues in the encoded protein undergo gamma carboxylation in a vitamin K-dependent manner. Undercarboxylation of the encoded protein is associated with osteoarthritis in humans. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Jul 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).