

## **Product datasheet for TL306909**

## 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

## **ABHD12 Human shRNA Plasmid Kit (Locus ID 26090)**

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** ABHD12 Human shRNA Plasmid Kit (Locus ID 26090)

**Locus ID:** 26090

**Synonyms:** ABHD12A; BEM46L2; C20orf22; dJ965G21.2; hABHD12; PHARC

**Vector:** pGFP-C-shLenti (TR30023) **E. coli Selection:** Chloramphenicol (34 ug/ml)

**Mammalian Cell** 

Puromycin

Selection: Format:

Lentiviral plasmids

Components: ABHD12 - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID =

26090). 5µg purified plasmid DNA per construct

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

RefSeq: NM 001042472, NM 015600, NM 015600.1, NM 015600.3, NM 015600.4, NM 001042472.1,

NM 001042472.2, BC014049, BC014049.2, NM 001042472.3

UniProt ID: O8N2K0

**Summary:** This gene encodes an enzyme that catalyzes the hydrolysis of 2-arachidonoyl glycerol (2-AG),

the main endocannabinoid lipid transmitter that acts on cannabinoid receptors, CB1 and CB2. The endocannabinoid system is involved in a wide range of physiological processes, including neurotransmission, mood, appetite, pain appreciation, addiction behavior, and inflammation.

Mutations in this gene are associated with the neurodegenerative disease, PHARC

(polyneuropathy, hearing loss, ataxia, retinitis pigmentosa, and cataract), resulting from an inborn error of endocannabinoid metabolism. Alternatively spliced transcript variants encoding different isoforms have been noted for this gene.[provided by RefSeq, Jan 2011]

**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).