

Product datasheet for TL301785

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

SECISBP2 Human shRNA Plasmid Kit (Locus ID 79048)

Product data:

Product Type: shRNA Plasmids

Product Name: SECISBP2 Human shRNA Plasmid Kit (Locus ID 79048)

Locus ID: 79048 Synonyms: SBP2

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

Mammalian Cell

Selection:

Puromycin

Format: Lentiviral plasmids

Components: SECISBP2 - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID =

79048). 5µg purified plasmid DNA per construct

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

RefSeq: <u>BC001189</u>, <u>NM 001282688</u>, <u>NM 001282689</u>, <u>NM 001282690</u>, <u>NM 024077</u>, <u>NM 001354696</u>,

NM 001354697, NM 001354698, NM 001354702, NM 024077.1, NM 024077.2, NM 024077.3, NM 024077.4, NM 001282689.1, NM 001282690.1, NM 001282688.1, BC001189.1, BC036109,

BC036109.1, BC023142, BC068466, BC099900, BM666620, NM 001282689.2,

NM 001282688.2, NM 024077.5

UniProt ID: Q96T21

Summary: The protein encoded by this gene is one of the essential components of the machinery

involved in co-translational insertion of selenocysteine (Sec) into selenoproteins. Sec is encoded by the UGA codon, which normally signals translation termination. The recoding of

UGA as Sec codon requires a Sec insertion sequence (SECIS) element; present in the 3'

untranslated regions of eukaryotic selenoprotein mRNAs. This protein specifically binds to the SECIS element, which is stimulated by a Sec-specific translation elongation factor. Mutations in this gene have been associated with reduction in enzymatic activity of type II iodothyronine

deiodinase (a selenoprotein) and abnormal thyroid hormone metabolism. Alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, Aug 2017]

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).