

## **Product datasheet for TL301256**

## OriGene Technologies, Inc.

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## **TAF1 Human shRNA Plasmid Kit (Locus ID 6872)**

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** TAF1 Human shRNA Plasmid Kit (Locus ID 6872)

Locus ID: 6872

**Synonyms:** BA2R; CCG1; CCGS; DYT3; DYT3/TAF1; KAT4; MRXS33; N-TAF1; NSCL2; OF; P250; TAF(II)250;

TAF2A; TAFII-250; TAFII250; XDP

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

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

Mammalian Cell

Selection:

Puromycin

Format: Lentiviral plasmids

Components: TAF1 - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 6872). 5µg

purified plasmid DNA per construct

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

RefSeq: NM 001286074, NM 004606, NM 138923, NR 104387, NR 104388, NR 104389, NR 104390,

NR 104391, NR 104392, NR 104393, NR 104394, NR 104395, NR 104396, NM 138923.1, NM 138923.2, NM 138923.3, NM 004606.1, NM 004606.2, NM 004606.3, NM 004606.4,

NM 001286074.1, BC172427

UniProt ID: P21675



## Summary:

Initiation of transcription by RNA polymerase II requires the activities of more than 70 polypeptides. The protein that coordinates these activities is the basal transcription factor TFIID, which binds to the core promoter to position the polymerase properly, serves as the scaffold for assembly of the remainder of the transcription complex, and acts as a channel for regulatory signals. TFIID is composed of the TATA-binding protein (TBP) and a group of evolutionarily conserved proteins known as TBP-associated factors or TAFs. TAFs may participate in basal transcription, serve as coactivators, function in promoter recognition or modify general transcription factors (GTFs) to facilitate complex assembly and transcription initiation. This gene encodes the largest subunit of TFIID. This subunit binds to core promoter sequences encompassing the transcription start site. It also binds to activators and other transcriptional regulators, and these interactions affect the rate of transcription initiation. This subunit contains two independent protein kinase domains at the N- and C-terminals, but also possesses acetyltransferase activity and can act as a ubiquitin-activating/conjugating enzyme. Mutations in this gene result in Dystonia 3, torsion, X-linked, a dystoniaparkinsonism disorder. Alternative splicing of this gene results in multiple transcript variants. This gene is part of a complex transcription unit (TAF1/DYT3), wherein some transcript variants share exons with TAF1 as well as additional downstream DYT3 exons. [provided by RefSeq, Oct 2013]

shRNA Design:

Performance Guaranteed: 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 <a href="mailto:techsupport@origene.com">techsupport@origene.com</a>. If you need a special design or shRNA sequence, please utilize our <a href="mailto:custom shRNA service">custom shRNA service</a>.

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).