

## Product datasheet for **SC325649**

### TRAF4AF1 (KNSTRN) (NM\_001142762) Human Untagged Clone

#### Product data:

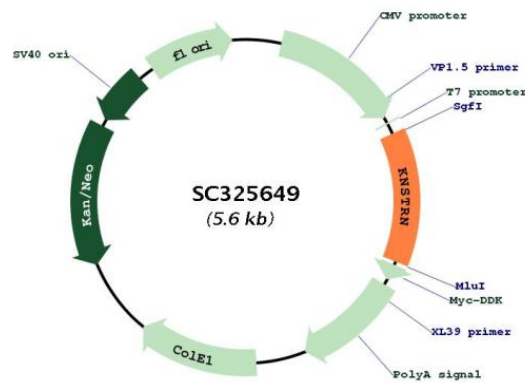
Product Type:	Expression Plasmids
Product Name:	TRAF4AF1 (KNSTRN) (NM_001142762) Human Untagged Clone
Tag:	Tag Free
Symbol:	KNSTRN
Synonyms:	C15orf23; HSD11; SKAP; TRAF4AF1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC325649 representing NM_001142762. Blue=Insert sequence Red=Cloning site Green=Tag(s)

```
GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGGCGGCTCCCGAAGCCCCGCCCTGGACAGAGTTTTCCGTACAACATGGCTGTCTACAGAGTGCAT
TCCCACCACTTCCGCTAGCTACCGGAAGTTTCTATTTGAAACCCAGGCGGCCGACTTAGCCGGTGGC
ACGACAGTTGCTGCAGGGAATCTTTAAACGAGAGCGAGAAGGACTGCGGGCAGGACCGCGGGCTCCT
GGGTTTCAGCCGTGCCCTCGTTACGATGACCAGTGTGGTTAAGACAGTGTATAGCCTGCAGCCCCC
TCTGCGCTGAGCGCGGCCAGCCGCGAGACACAAAACCGGGCCACTTCTAAGAGTCTCTTACCTGTT
AGGTCAAAGAAGTCGATGTTTCAAACAGCTTCAATTCAGGAGTCCAGAGAATGATGTTACAAAATC
ACCAAACCTGAGACGAGAGAATGGCAAAATGAAAGCTACTGACACTGCCACCAGAAGGAATGTCAGAAAA
GGCTACAAACCACTGAGTAAGCAAAAATCAGAGGAAGAGCTCAAGGACAAGAACCAGCTGTTAGAAGCC
GTCAACAAGCAGTTGCACCAGAAGTTGACTGAAACTCAGGGAGAGCTGAAGGACCTGACCCAGAAGGTA
GAGCTGCTGGAGAAGTTTCGGGACAACGTTTGGCAATTTGGAGAGCAAGGGCCTTGATCCAGTTGCT
GTTAGAACTTTGCAAGAGGAGCTGAAGCTTTTAA
ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGCGC
```

Restriction Sites: Sgfl-Mlul



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**Plasmid Map:**


**ACCN:** NM\_001142762

**Insert Size:** 726 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in *E. coli* are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

**OTI Annotation:** This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

**Reconstitution Method:**

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

**RefSeq:** [NM\\_001142762.1](#)

**RefSeq Size:** 1701 bp

**RefSeq ORF:** 726 bp

**Locus ID:** 90417

**UniProt ID:** [Q9Y448](#)

**Cytogenetics:** 15q15.1

**MW:** 26.6 kDa

**Gene Summary:** Essential component of the mitotic spindle required for faithful chromosome segregation and progression into anaphase (PubMed:19667759). Promotes the metaphase-to-anaphase transition and is required for chromosome alignment, normal timing of sister chromatid segregation, and maintenance of spindle pole architecture (PubMed:19667759, PubMed:22110139). The astrin (SPAG5)-kinastrin (SKAP) complex promotes stable microtubule-kinetochore attachments (PubMed:21402792). Required for kinetochore oscillations and dynamics of microtubule plus-ends during live cell mitosis, possibly by forming a link between spindle microtubule plus-ends and mitotic chromosomes to achieve faithful cell division (PubMed:23035123). May be involved in UV-induced apoptosis via its interaction with PRPF19; however, these results need additional evidences (PubMed:24718257).[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (3) differs in the 3' UTR and lacks an alternate exon in the 3' coding region, which results in a frameshift and an early stop codon, compared to variant 1. The encoded isoform (c) has a shorter and distinct C-terminus, compared to isoform a.