

## Product datasheet for RC227397

### TRAF4AF1 (KNSTRN) (NM\_001142761) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	TRAF4AF1 (KNSTRN) (NM_001142761) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	TRAF4AF1
Synonyms:	C15orf23; HSD11; SKAP; TRAF4AF1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC227397 representing NM_001142761 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCGGCTCCCGAAGCCCCGCCCTGGACAGAGTTTTCCGTACAACATGGCTGTCTACAGAGTGCATT  
CCCACCCACTCCGCCTAGCTACCGAAGTTTCTATTTGAAACCCAGGCGGCCGACTTAGCCGGTGGCAC  
GACAGTTGCTGCAGGGAATCTTTAAACGAGAGCGAGAAGGACTGCGGGCAGGACCGGGGCTCCTGGG  
GTTGAGCCGTGCCGCTCGTTACGATGACCAAGTGTGGTTAAGACAGTGTATAGCCTGCAGCCCCCTCTG  
CGCTGAGCGGGCCAGCCGGCAGACACAACTCGGGCCACTTCTAAGAGTCTTTACCTGTTAGGTC  
CAAAGAAGTCGATGTTTCCAAACAGTTTCAATTCAGGAGGTCCAGAGAATGATGTTACAAAAATCACCAA  
CTGAGACGAGAGAATGGCAAAATGAAAGCTACTGACACTGCCACCAGAAGGAATGTCAGAAAAGGCTACA  
AACCCTGAGTAAGCAAAAATCAGAGGAAGAGCTCAAGGACAAGAACCAGCTGTTAGAAGCCGTCACAA  
GCAGTTGCACCAGAAGTTGACTGAAACTCAGGGAGAGCTGAAGGACCTGACCCAGAAGGTAGAGCTGCTG  
GAGAAGTTTCGGGACAACTGTTTGGCAATTTGGAGAGCAAGGGCCTTGATCCAGCTTTAGGCAAGT  
CCCTGGCATCACGACAAGAATCCACTACTGATCACATGGACTCTATGTTGCTGTTAGAACTTTGCAAGA  
GGAGCTGAAGCTTTTTAACGAAACAGCCAAAAGCAGATGGAGGAGTTACAGATTGCTTGGATGAATCAT  
GGGATATTGCACCAAATG

**ACGCGT**ACGCGGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC227397 representing NM\_001142761  
Red=Cloning site Green=Tags(s)

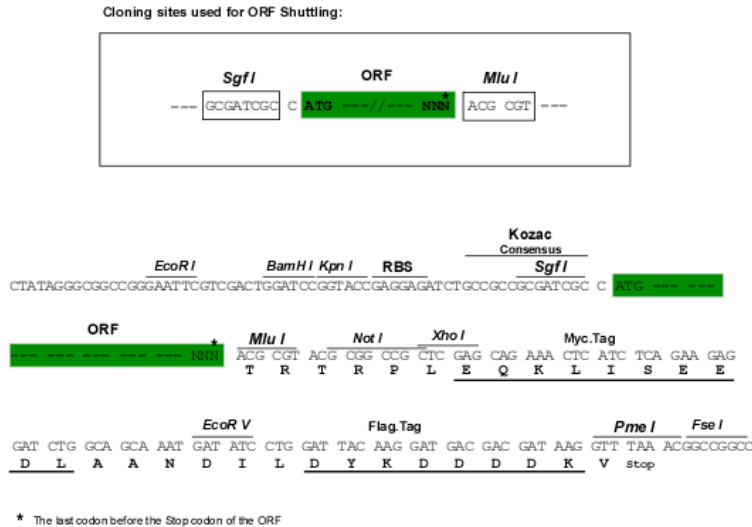
MAAPEAPPLDRVFRTTWLSTECDSHPLPPSYRKFLFETQAADLAGGTTVAAGNLLNESEKDCGQDRRAPG  
 VQPCRLVTMTSVVKTVYSLQPPSALSGGQPADTQTRATSKSLLPVRKEVDVSKQLHSGGPENDVTKITK  
 LRRENGQMKATDTATRRNVRKGYKPLSKQKSEEELKDKNQLEAVNKQLHQKLTETQGELKDLTQKVELL  
 EKFRDNCLAILESKGLDPALGSETLASRQESTTDHMSMLLLETLQEELKLFNETAKKQMEELQIAWMNH  
 GILHQM

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk8049\\_e04.zip](https://cdn.origene.com/chromatograms/mk8049_e04.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001142761

**ORF Size:** 858 bp

**OTI Disclaimer:** 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 clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

**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\\_001142761.1](#), [NP\\_001136233.1](#)

**RefSeq ORF:** 861 bp

**Locus ID:** 90417

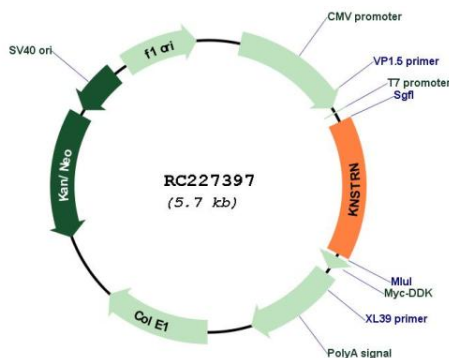
**UniProt ID:** [Q9Y448](#)

**Cytogenetics:** 15q15.1

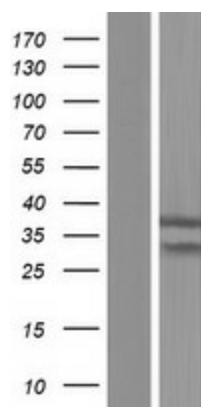
**MW:** 31.7 kDa

**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]

## Product images:



Circular map for RC227397



Western blot validation of overexpression lysate (Cat# [LY428260]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC227397 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).