

Product datasheet for **RG206699**

DNAI3 (NM_145172) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	DNAI3
Synonyms:	DIC3; NYD-SP29; WDR63
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



ORF Nucleotide Sequence: >RG206699 representing NM_145172
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCTCCAAAACAAAAGAAAAAGACATCACGTGGCAAAAAAGACTAAAACCAAGTATTAGCTGCTAGTG
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CATGGAGGTGATG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG206699 representing NM_145172

Red=Cloning site Green=Tags(s)

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MAPKQKKKTSRGKKRLKPVLAASEDMEPVNMESMGHPEIYPLVLTTKTQEIFNCRIDEDVTDEQPYKLIN
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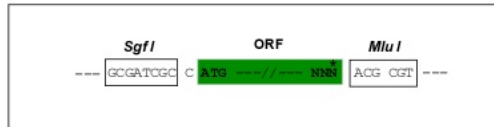
TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



EcoRI BamHI KpnI RBS Kozac Consensus SgfI AscI
 CTATAGGGCGGCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGATCGCCGGCGCCAGATCT
 HindIII NheI RsrII MluI NotI XhoI GFP Tag
 CAAGCTTAAGCTAGCTAGCGGACCG ACG CGT ACG CGG CCG CTC GAG ATG GAG AGC GAC --- --- ---
 T R T R P L E M E S D - - -
 --- --- GAA GAA AGA GTT TAA ACGGCCGCCCGGAGCT
 - - E E R V Stop

ACCN:	NM_145172
ORF Size:	2673 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_145172.5](#)

RefSeq Size: 3016 bp

RefSeq ORF: 2676 bp

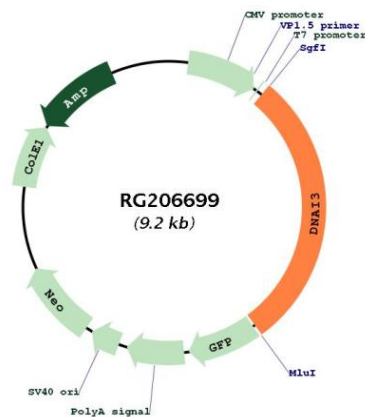
Locus ID: 126820

UniProt ID: [Q8IWG1](#)

Cytogenetics: 1p22.3

Gene Summary: Acts as a negative regulator of cell migration, invasion, and metastasis downstream of p53/TP53, through inhibition of Arp2/3 complex-mediated actin polymerization (PubMed:32128961). Via its association with the multisubunit axonemal dynein complex, is potentially involved in the regulation of cilia function (By similarity). May play a role in osteogenesis of dental tissue-derived mesenchymal stem cells (By similarity). [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RG206699