

## Product datasheet for **RG224432**

### DKK2 (NM\_014421) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	DKK2 (NM_014421) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	DKK2
Synonyms:	DKK-2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG224432 representing NM_014421 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCCGCTTGATGCGGAGCAAGGATTCGTCCTGCTGCCTGCTCCTACTGGCCGCGGTGCTGATGGTGG  
AGAGCTCACAGATCGGCAGTTCGCGGGCCAACTCACTCCATCAAGTCTCTCTGGCGGGGAGACGCC  
TGGTCAGGCCCAATCGATCTGCGGGCATGTACCAAGGACTGGCATTGCGCGGCAGTAAGAAGGGCAA  
AACCTGGGGCAGGCTACCCTTGTAGCAGTGATAAGGAGTGTGAAGTTGGGAGGTATTGCCACAGTCCCC  
ACCAAGGATCATCGGCCATGATGGTGTGTCGGAGAAAAAAGAAGCGCTGCCACCGAGATGGCATGTGCTG  
CCCCAGTACCCGCTGCAATAATGGCATCTGTATCCAGTACTGAAAGCATCTTAACCCCTCACATCCC  
GCTCTGGATGGTACTCGGCACAGAGATCGAAACCACGGTCATTACTCAAACCATGACTTGGGATGGCAGA  
ATCTAGGAAGACCACACACTAAGATGTCACATATAAAAGGGCATGAAGGAGACCCCTGCCTACGATCATC  
AGACTGCATTGAAGGGTTTTGCTGTGCTCGTCAATTTCTGGACCAAAATCTGCAAACCAAGTCTCCATCAG  
GGGGAAGTCTGTACCAACAACGCAAGAAGGGTTCTCATGGGCTGGAAATTTCCAGCGTTGCGACTGTG  
CGAAGGGCCTGTCTTCAAAGTATGAAAGATGCCACCTACTCTCAAAGCCAGACTCCATGTGTGTCA  
GAAAATT

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >RG224432 representing NM\_014421  
Red=Cloning site Green=Tags(s)

MAALMRSKDSSCCLLLLLAAVLMVESSQIGSSRAKLNSIKSSLGGETPGQAANRSAGMYQGLAFGGSKKGGK  
 NLGQAYPCSSDKECEVGRYCHSPHQSSACMVCRRKKRCHRDMCCPSTRCNGGICIPVTESILTPHIP  
 ALDGTNRHRDRNHGHYSNHDLWQNLGRPHTKMSHIKGHEGDPCLRSSDCIEGFCCARHFWTKICKPVLHQ  
 GEVCTKQRKKGSHGLEIFQRCDCAKGLSCKVWKDATYSSKARLHVCQKI

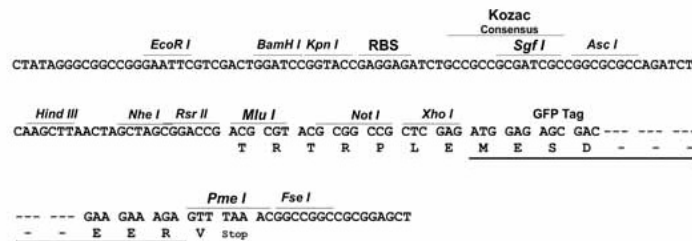
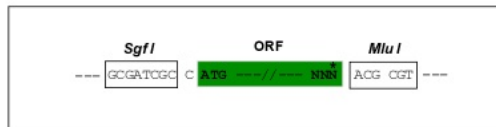
TRTRPLE - GFP Tag - V

**Chromatograms:** [https://cdn.origene.com/chromatograms/ja2010\\_h03.zip](https://cdn.origene.com/chromatograms/ja2010_h03.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shutting:



**ACCN:** NM\_014421

**ORF Size:** 777 bp

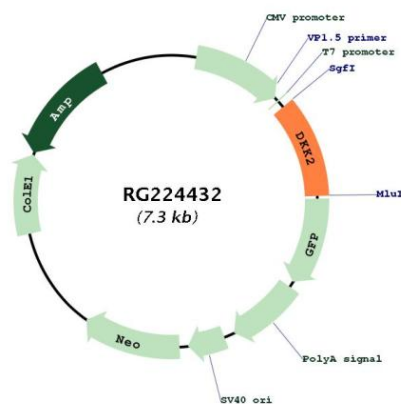
**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in *E. coli* are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of 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 clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<u>NM_014421.3</u>
<b>RefSeq Size:</b>	3659 bp
<b>RefSeq ORF:</b>	780 bp
<b>Locus ID:</b>	27123
<b>UniProt ID:</b>	<u>Q9UBU2</u>
<b>Cytogenetics:</b>	4q25
<b>Protein Families:</b>	Adult stem cells, Cancer stem cells, Druggable Genome, ES Cell Differentiation/IPS, Secreted Protein, Stem cell relevant signaling - Wnt Signaling pathway
<b>Protein Pathways:</b>	Wnt signaling pathway
<b>Gene Summary:</b>	This gene encodes a protein that is a member of the dickkopf family. The secreted protein contains two cysteine rich regions and is involved in embryonic development through its interactions with the Wnt signaling pathway. It can act as either an agonist or antagonist of Wnt/beta-catenin signaling, depending on the cellular context and the presence of the co-factor kremen 2. Activity of this protein is also modulated by binding to the Wnt co-receptor LDL-receptor related protein 6 (LRP6). [provided by RefSeq, Jul 2008]

## Product images:



Circular map for RG224432