

Product datasheet for **RG224973**

CDC23 (NM_004661) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CDC23 (NM_004661) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	CDC23
Synonyms:	ANAPC8; APC8; CUT23
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG224973 representing NM_004661
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCTGCGAGTACCTCCATGGTCCCGGTGGCTGTGACGGCGGCAGTGGCGCCTGTCTGTCCATAAACA
 GCGATTTCTCAGATTTGCGGGAAATTAAGCAACTGCTGCTTATTGCGGGCCTTACCCGGGAGCGGGG
 CCTACTACACAGTAGCAATGGTCGCGGAGTTGGCTTTCTCTCCCTGCATTGCCTCTGGCCGAGCTG
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 TTGACGTTAAAGAGTATGATCGGCAGCACATTTCTGCATGGCTGCAATAGCAAGAAAGCCTATTTTCT
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 TGCATTTAATGATACCCGGGAAGAAGGTAAGGCCTTACTCGGCAATCTACAGCTTCCGAACCAAGGC
 GAGACTCTACCACCGAGGTGCCTGCTCCCTTTTCTACCTGCTCACTCTCTGCTAACAAATACCCCA
 CACGAGAGTTTCTCACTCAACTGTCTTCTGTACGCCA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG224973 representing NM_004661
 Red=Cloning site Green=Tags(s)

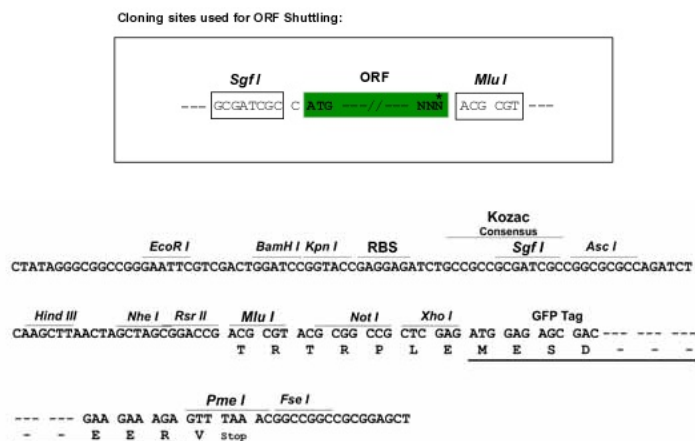
MAASTSMVPVAVTAAPVLSINSDFLREIKKQLLLIAGLTRERGLLHSSKWSAELAFSLPALPLAEL
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 KALSIFNELRKQDPYRIENMDTFSNLLYVRSMKSELSYLAHNLCEIDKYRVETCCVIGNYSLRSQHEKA
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 YYRRAHQLRPNDSRMLVALGECYEKLNQLVEAKKCYWRAYAVGDVEKMALVKLAKLHEQLTESEQAQCY
 IKYIQDIYSCGEIVEHLEESTAFRYLAQYFYFKCKLWDEASTCAQKCCAFNDTREEKALLRQILQLRNQG
 EPTTTEVPAPFFLPASLSANNTPTRRVSPLNLSVTP

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



ACCN: NM_004661

ORF Size: 1791 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_004661.4](#)

RefSeq Size: 3169 bp

RefSeq ORF: 1794 bp

Locus ID: 8697

UniProt ID: [Q9UJX2](#)

Cytogenetics: 5q31.2

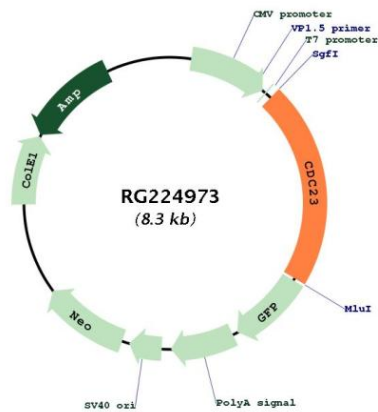
Domains: TPR, APC8

Protein Families: Druggable Genome

Protein Pathways: Cell cycle, Oocyte meiosis, Progesterone-mediated oocyte maturation, Ubiquitin mediated proteolysis

Gene Summary: The protein encoded by this gene shares strong similarity with *Saccharomyces cerevisiae* Cdc23, a protein essential for cell cycle progression through the G2/M transition. This protein is a component of anaphase-promoting complex (APC), which is composed of eight protein subunits and highly conserved in eukaryotic cells. APC catalyzes the formation of cyclin B-ubiquitin conjugate that is responsible for the ubiquitin-mediated proteolysis of B-type cyclins. This protein and 3 other members of the APC complex contain the TPR (tetratricopeptide repeat), a protein domain important for protein-protein interaction. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG224973