

Product datasheet for **MG226032**

Cdk5rap2 (NM_145990) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cdk5rap2 (NM_145990) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Cdk5rap2
Synonyms:	2900018K03Rik; an; mKIAA1633
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG226032 representing NM_145990 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGACTCGGGGATGGAAGAGGAAGGGCCCTGCCTGGGACCCTCAGCGGTTGCAGTGGCCTTCACCCTG
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 GAAGGCCAGGGGAAACCTGGAGCTCAGGCCTGGGGCCACCCGTCCAGGAGCATCCAGTCCCAGCAGACCG
 GGCTCA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG226032 representing NM_145990
 Red=Cloning site Green=Tags(s)

MDSGMEEEGALPGTSLGCSGLHPVLPSPDLVVISDTSGLGNGVLPMSSEKVSPTRRNMKDFENQITELK
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 DVQTQEALSPKSHKLGPKGSSSVPLSKFLSSMNTAKLVLEKASRLKLFWRVSVPTNGQCSLHCEQIGEM
 KAENTKLHKKLFEQEKLQNTAKLLQQSKHQEKVIFDQLVITHQVLRKARGNLELRPGATRPGASSPSRPGS

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

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:	<ol style="list-style-type: none">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_145990.4 , NP_666102.2
RefSeq Size:	5603 bp
RefSeq ORF:	5469 bp
Locus ID:	214444
UniProt ID:	Q8K389
Cytogenetics:	4 C2
Gene Summary:	Potential regulator of CDK5 activity via its interaction with CDK5R1. Negative regulator of centriole disengagement (licensing) which maintains centriole engagement and cohesion (PubMed:20627074). Involved in regulation of mitotic spindle orientation (PubMed:20460369). Plays a role in the spindle checkpoint activation by acting as a transcriptional regulator of both BUBR1 and MAD2 promoter. Required for the recruitment of AKAP9 to centrosomes (By similarity). Plays a role in neurogenesis (PubMed:20471352). Contrary to higher mammalian orthologs, including human, chimpanzee, bovine and dog, does not interact with EB1/MAPRE1, therefore its function in the regulation of microtubule dynamics is unclear (PubMed:19553473).[UniProtKB/Swiss-Prot Function]