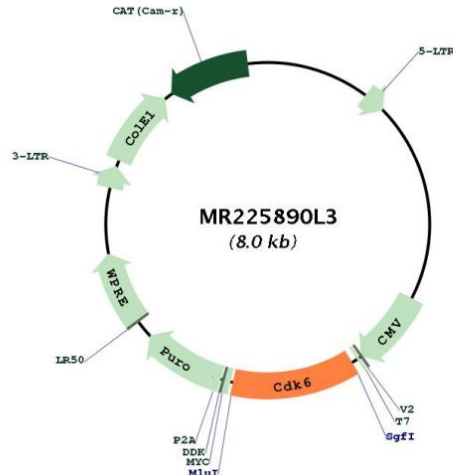


Plasmid Map:


ACCN: NM_009873

ORF Size: 978 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_009873.2](#), [NP_034003.1](#)

RefSeq Size: 2470 bp

RefSeq ORF: 981 bp

Locus ID: 12571

UniProt ID: [Q64261](#)

Cytogenetics: 5 2.04 cM

Gene Summary: This gene encodes a member of the cyclin dependent kinase family of proteins that play important roles in the progression and regulation of the cell cycle. The encoded protein binds to a D-type cyclin to form an active kinase complex to regulate progression through the G1 phase of the cell cycle. Mice lacking the encoded protein exhibit thymic and splenic hypoplasia, and hematopoietic defects such as reduced number of megakaryocytes and erythrocytes. A pseudogene of this gene has been defined on chromosome 4. [provided by RefSeq, Aug 2015]