

Product datasheet for SC201542

Chk2 (CHEK2) (NM_001005735) Human 3' UTR Clone

Product data:

Product Type:	3' UTR Clones
Product Name:	Chk2 (CHEK2) (NM_001005735) Human 3' UTR Clone
Symbol:	Chk2
Synonyms:	CDS1; CHK2; hCds1; HuCds1; LFS2; PP1425; RAD53
Mammalian Cell Selection:	Neomycin
Vector:	pMirTarget (PS100062)
ACCN:	NM_001005735
Insert Size:	184 bp
Insert Sequence:	<p>>SC201542 3'UTR clone of NM_001005735</p> <p>The sequence shown below is from the reference sequence of NM_001005735. The complete sequence of this clone may contain minor differences, such as SNPs.</p> <p>Blue=Stop Codon Red=Cloning site</p> <p>GGCAAGTTGGACGCCCGCAAGATCCGCGAGATTCTCATTAAGGCCAAGAAGGCCGAAAGATCGCCGTG TAACAATTGGCAGAGCTCAGAATTCAACGATCGCC CGCCAGCTGTGTGTGCTGTGTGTAACTCCGTGGTTGAACACGAAAGAAATGTACCTTCTTTC ACTCTGCATCTTTCTTTCTTTGAGTCTGTTTTTATAGTTTGTATTTAATTATGGAATAATTGC TTTTTCACAGTCACTGATGTACAATAAAAACCTGATGGAACCTGG ACGCGTAAGCGGCCGCGCATCTAGATTGAAGAAAATGACCGACCAAGCGACGCCAACCTGCCATCA CGAGATTCGATTCCACCGCCGCTTCTATGAAAGG</p>
Restriction Sites:	SgfI-MluI
OTI Disclaimer:	Our molecular clone sequence data has been matched to the sequence identifier above as a point of reference. Note that the complete sequence of this clone is largely the same as the reference sequence but may contain minor differences, e.g., single nucleotide polymorphisms (SNPs).
Components:	The cDNA clone is shipped in a 2-D bar-coded Matrix tube as 10 ug dried plasmid DNA. The package also includes 100 pmols of both the corresponding 5' and 3' vector primers in separate vials.
RefSeq:	<u>NM_001005735.2</u>


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Summary:

In response to DNA damage and replication blocks, cell cycle progression is halted through the control of critical cell cycle regulators. The protein encoded by this gene is a cell cycle checkpoint regulator and putative tumor suppressor. It contains a forkhead-associated protein interaction domain essential for activation in response to DNA damage and is rapidly phosphorylated in response to replication blocks and DNA damage. When activated, the encoded protein is known to inhibit CDC25C phosphatase, preventing entry into mitosis, and has been shown to stabilize the tumor suppressor protein p53, leading to cell cycle arrest in G1. In addition, this protein interacts with and phosphorylates BRCA1, allowing BRCA1 to restore survival after DNA damage. Mutations in this gene have been linked with Li-Fraumeni syndrome, a highly penetrant familial cancer phenotype usually associated with inherited mutations in TP53. Also, mutations in this gene are thought to confer a predisposition to sarcomas, breast cancer, and brain tumors. This nuclear protein is a member of the CDS1 subfamily of serine/threonine protein kinases. Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Apr 2012]

Locus ID:

11200

MW:

7.2