

## Human Cell Cycle Primer Library

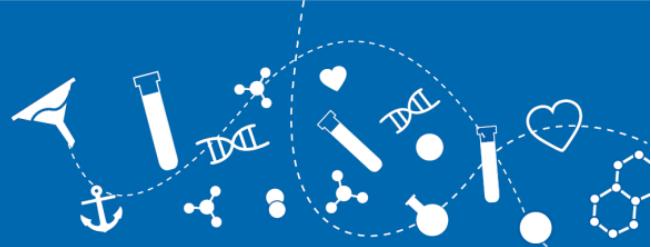
**Catalog No:** HCC-1  
**Supplier:** RealTimePrimers  
**Lot No:** XXXXX  
**Supplied as:** solid  
**Stability:** store at -20°C

### Description

Contains 88 primer sets directed against cell cycle genes and 8 housekeeping gene primer sets. Provided in a 96-well microplate (20 ul - 10 uM). Perform up to 100 PCR arrays (based on 20 ul assay volume per reaction). Just add cDNA template and SYBR green master mix.

### Gene List:

- ABL1 V-abl Abelson murine leukemia viral oncogene homolog 1
- ANAPC2 Anaphase promoting complex subunit 2
- ANAPC4 Anaphase promoting complex subunit 4
- ATM Ataxia telangiectasia mutated (includes complementation groups A, C and D)
- ATR Ataxia telangiectasia and Rad3 related
- BAX BCL2-associated X protein
- BCCIP BRCA2 and CDKN1A interacting protein
- BCL2 B-cell CLL/lymphoma 2
- BIRC5 Baculoviral IAP repeat-containing 5 (survivin)
- BRCA1 Breast cancer 1, early onset
- BRCA2 Breast cancer 2, early onset
- CCNA1 Cyclin A1
- CCNA2 Cyclin A2
- CCNB1 Cyclin B1
- CCNB2 Cyclin B2
- CCNC Cyclin C
- CCND1 Cyclin D1
- CCND2 Cyclin D2
- CCNE1 Cyclin E1
- CCNE2 Cyclin E2
- CCNF Cyclin F
- CCNG1 Cyclin G1
- CCNG2 Cyclin G2
- CCNH Cyclin H
- CCNT1 Cyclin T1
- CDC16 Cell division cycle 16 homolog (*S. cerevisiae*)
- CDC2 Cell division cycle 2, G1 to S and G2 to M
- CDC20 Cell division cycle 20 homolog (*S. cerevisiae*)
- CDC34 Cell division cycle 34 homolog (*S. cerevisiae*)
- CDK2 Cyclin-dependent kinase 2
- CDK4 Cyclin-dependent kinase 4
- CDK5 Cyclin-dependent kinase 5
- CDK5R1 Cyclin-dependent kinase 5, regulatory subunit 1 (p35)
- CDK5RAP1 CDK5 regulatory subunit associated protein 1
- CDK6 Cyclin-dependent kinase 6
- CDK7 Cyclin-dependent kinase 7 (MO15 homolog, *Xenopus laevis*, cdk-activating kinase)
- CDK8 Cyclin-dependent kinase 8
- CDKN1A Cyclin-dependent kinase inhibitor 1A (p21, Cip1)
- CDKN1B-2 Cyclin-dependent kinase inhibitor 1B (p27, Kip1)
- CDKN2A-3 Cyclin-dependent kinase inhibitor 2A (melanoma, p16, inhibits CDK4)
- CDKN2B Cyclin-dependent kinase inhibitor 2B (p15, inhibits CDK4)
- CDKN2C Cyclin-dependent kinase inhibitor 2C (p18, inhibits CDK4)
- CDKN2D Cyclin-dependent kinase inhibitor 2D (p19, inhibits CDK4)
- CDKN3 Cyclin-dependent kinase inhibitor 3 (CDK2- associated dual specificity phosphatase)
- CHEK1 CHK1 checkpoint homolog (*S. pombe*)
- CHEK2 CHK2 checkpoint homolog (*S. pombe*)
- CKS1B CDC28 protein kinase regulatory subunit 1B
- CKS2 CDC28 protein kinase regulatory subunit 2
- CUL1 Cullin 1
- CUL2 Cullin 2
- CUL3 Cullin 3
- DDX11 DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 11 (CHL1-like helicase homolog, *S. cerevisiae*)
- DIRAS3 DIRAS family, GTP-binding RAS-like 3
- DNM2 Dynamin 2
- E2F4 E2F transcription factor 4, p107/p130-binding



- GADD45A-6 Growth arrest and DNA-damage-inducible, alpha
- GTF2H1 General transcription factor IIH, polypeptide 1, 62kDa
- GTSE1 G-2 and S-phase expressed 1
- HERC5 Hect domain and RLD 5
- HUS1 HUS1 checkpoint homolog (S. pombe)
- KNTC1 Kinetochore associated 1
- KPNA2 Karyopherin alpha 2 (RAG cohort 1, importin alpha 1)
- MAD2L1 MAD2 mitotic arrest deficient-like 1 (yeast)
- MAD2L2 MAD2 mitotic arrest deficient-like 2 (yeast)
- MCM2 MCM2 minichromosome maintenance deficient 2, mitotin (S. cerevisiae)
- MCM3 MCM3 minichromosome maintenance deficient 3 (S. cerevisiae)
- MCM4 MCM4 minichromosome maintenance deficient 4 (S. cerevisiae)
- MCM5 MCM5 minichromosome maintenance deficient 5, cell division cycle 46 (S. cerevisiae)
- MKI67 Antigen identified by monoclonal antibody Ki-67
- MNAT1 Menage a trois homolog 1, cyclin H assembly factor (*Xenopus laevis*)
- MRE11A MRE11 meiotic recombination 11 homolog A (S. cerevisiae)
- NBN Nibrin
- PCNA Proliferating cell nuclear antigen
- RAD1 RAD1 homolog (S. pombe)
- RAD17 RAD17 homolog (S. pombe)
- RAD51 RAD51 homolog (RecA homolog, E. coli) (S. cerevisiae)
- RB1 Retinoblastoma 1 (including osteosarcoma)
- RBBP8 Retinoblastoma binding protein 8
- RBL1 Retinoblastoma-like 1 (p107)
- RBL2 Retinoblastoma-like 2 (p130)
- RPA3 Replication protein A3, 14kDa
- SERTAD1 SERTA domain containing 1
- SKP2 S-phase kinase-associated protein 2 (p45)
- SUMO1 SMT3 suppressor of mif two 3 homolog 1 (S. cerevisiae)
- SUMO2 SMT3 suppressor of mif two 3 homolog 1 (S. cerevisiae)
- TFDP2 Transcription factor Dp-2 (E2F dimerization partner 2)
- TP53 Tumor protein p53 (Li-Fraumeni syndrome)
- UBE1 Ubiquitin-activating enzyme E1 (A1S9T and BN75 temperature sensitivity complementing)
- ACTB Actin, beta
- B2M Beta-2-microglobulin
- GAPD Glyceraldehyde-3-phosphate dehydrogenase
- GUSB Glucuronidase, beta
- HPRT1 Hypoxanthine phosphoribosyltransferase 1
- PGK Phosphoglycerate kinase 1
- PPIA Peptidylprolyl isomerase A
- RPL13A Ribosomal protein L13a

## Usage

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