

# **HtrA4 may play a major role in inhibiting endothelial repair in pregnancy complication preeclampsia**

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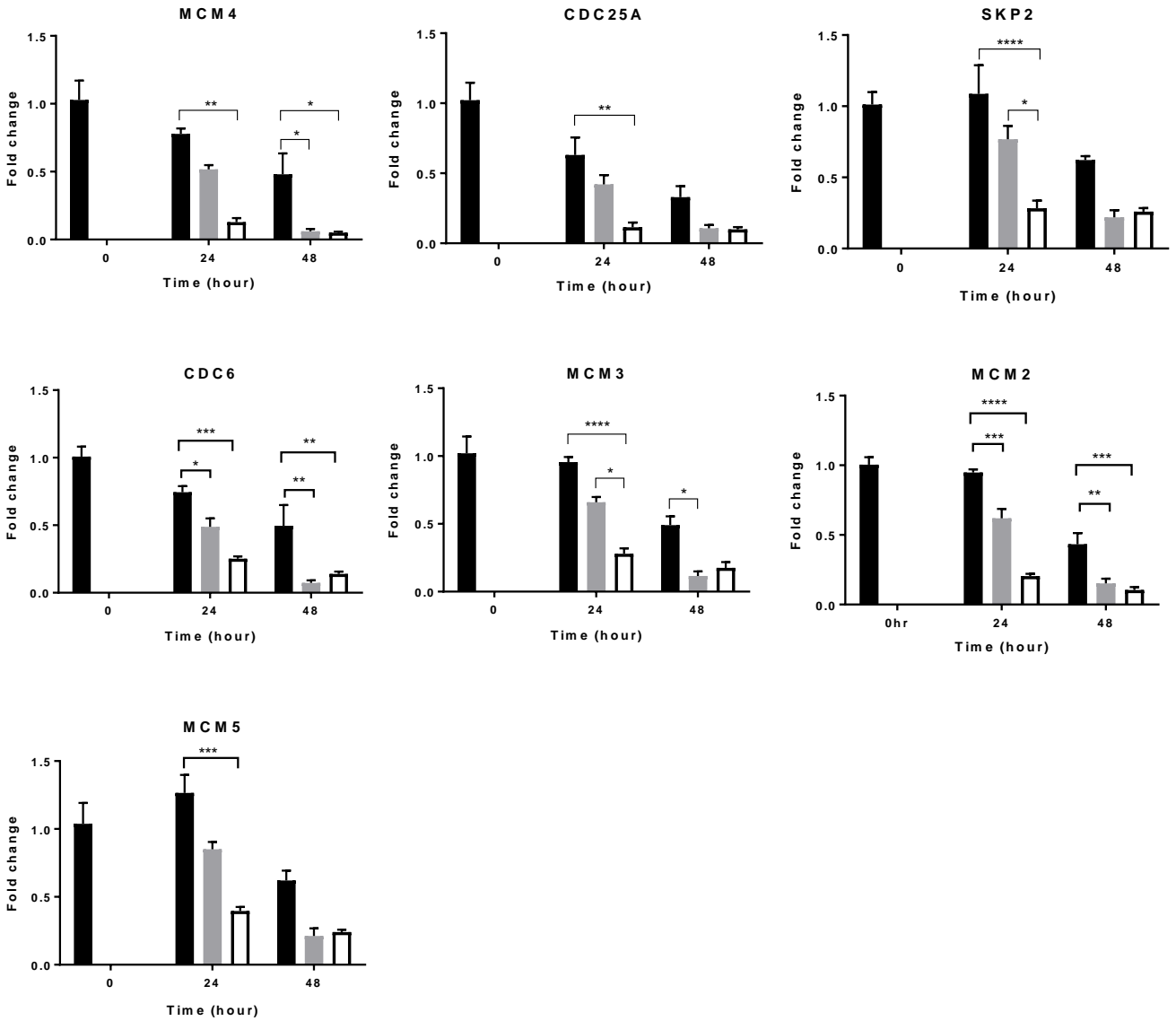
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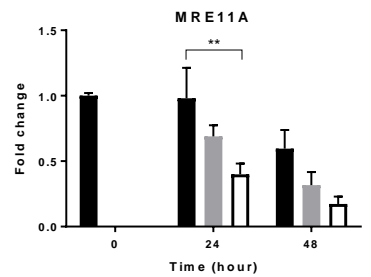
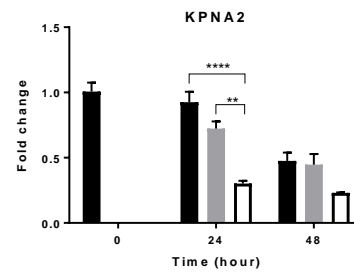
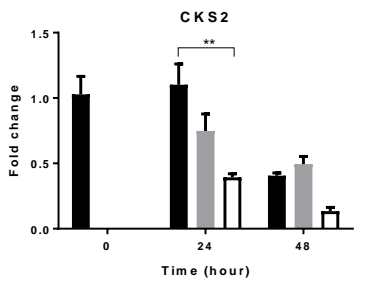
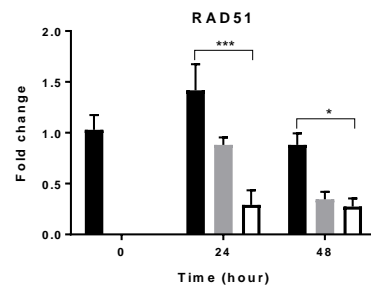
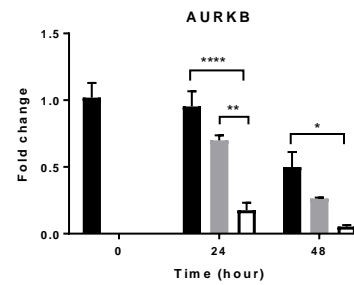
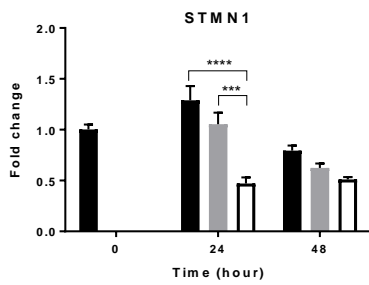
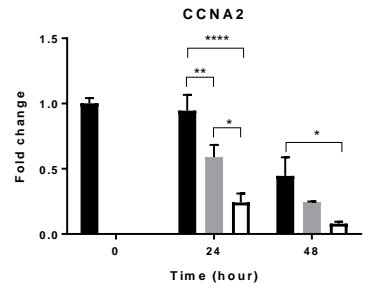
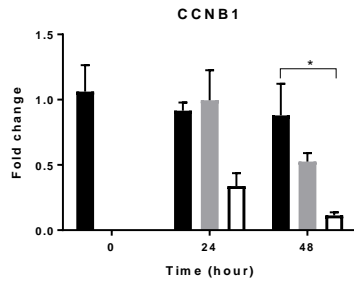
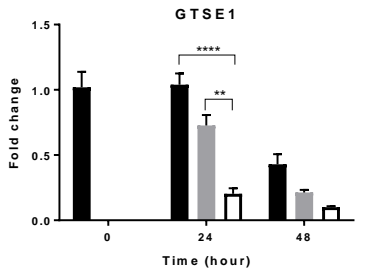
## G1 Phase & S Phase

- Vehicle control
- 1.5 $\mu$ g/ml HtrA4
- 3.0 $\mu$ g/ml HtrA4



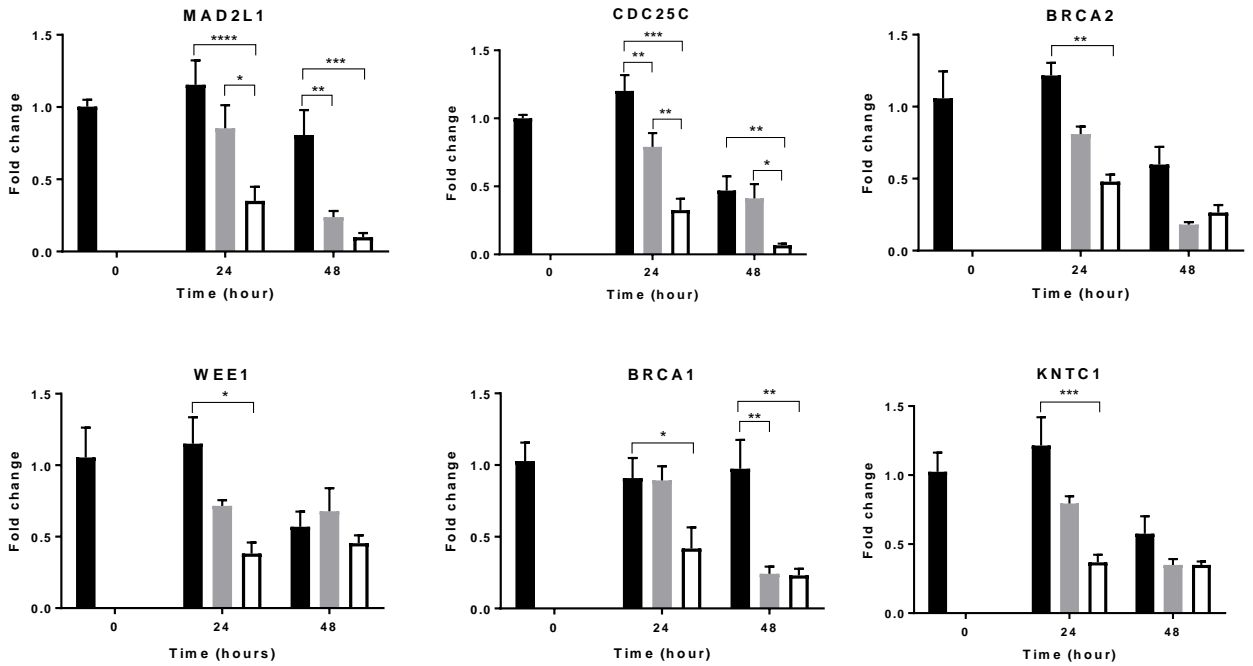
## G2 Phase & M Phase

- Vehicle control
- 1.5µg/ml HtrA4
- 3.0µg/ml HtrA4

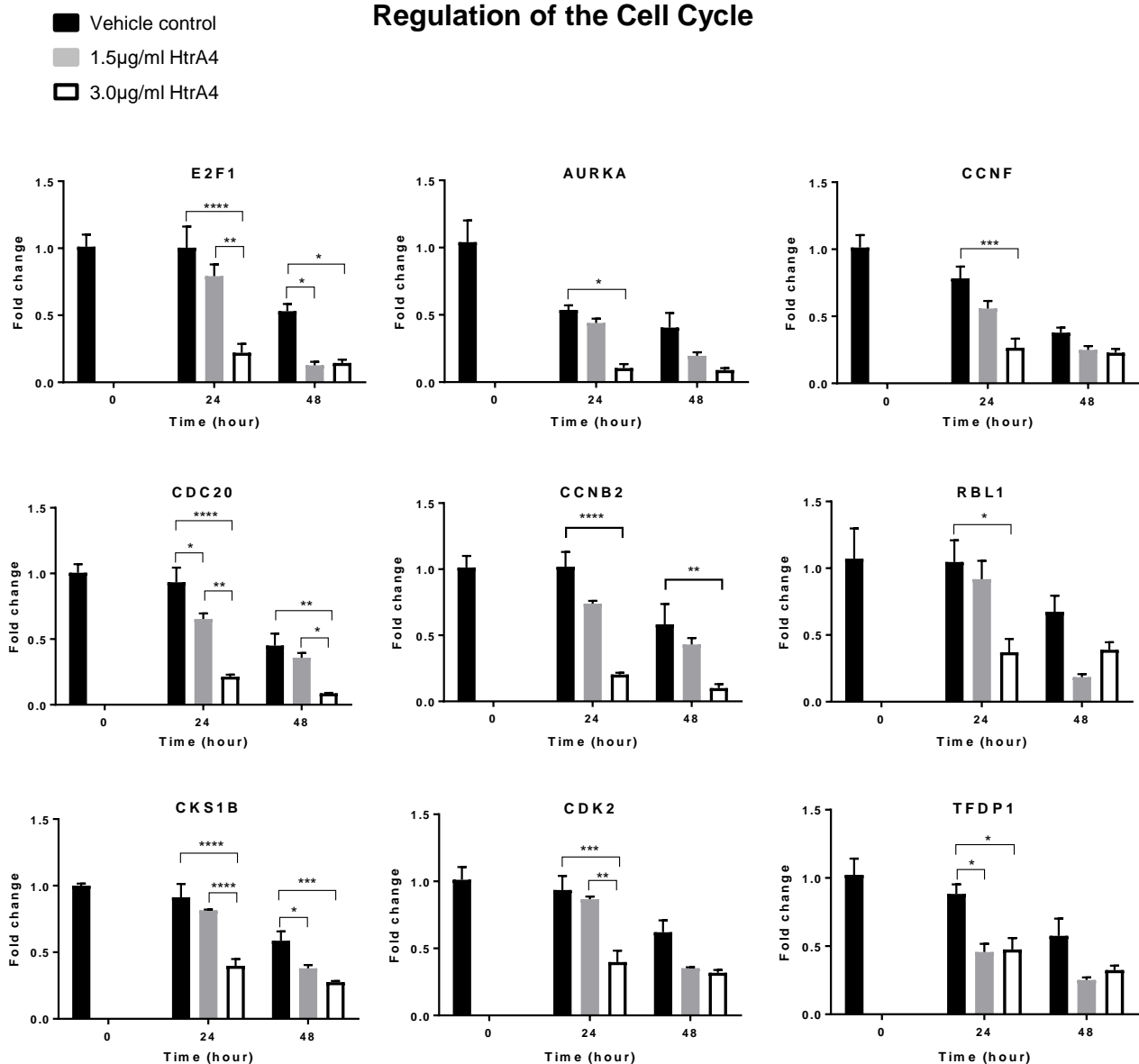


- Vehicle control
- 1.5µg/ml HtrA4
- 3.0µg/ml HtrA4

## Cell Cycle Checkpoint and Cell Cycle Arrest

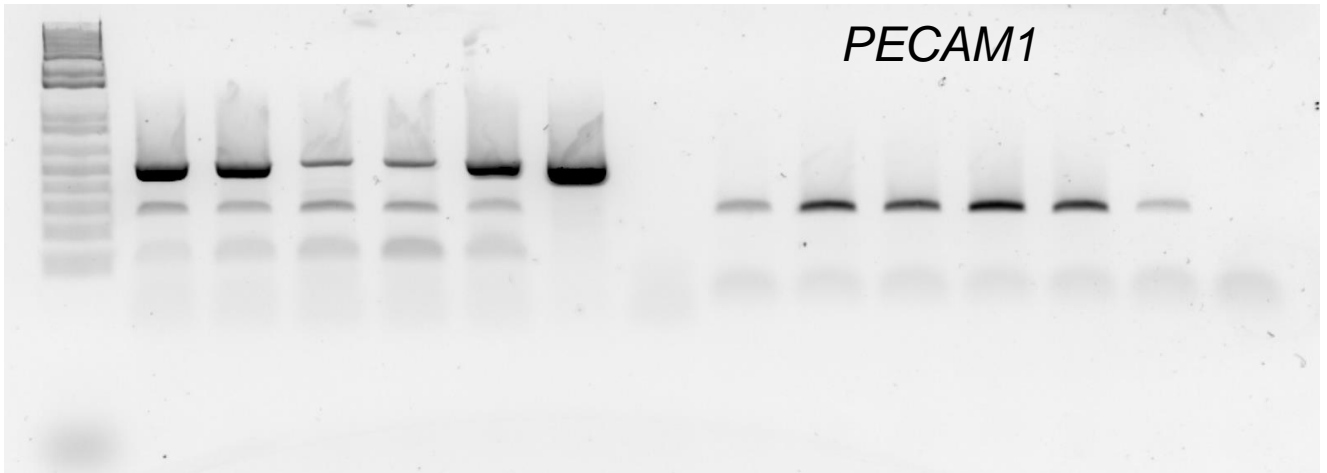


## Regulation of the Cell Cycle

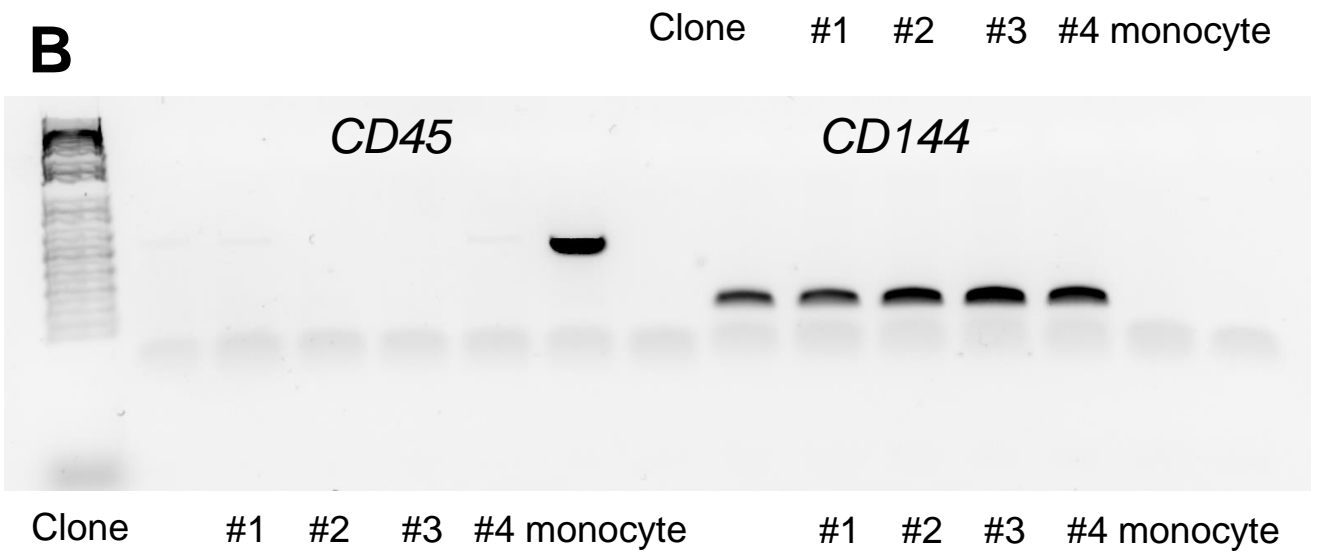


**Supplementary Figure 1.** Real-time RT-PCR validations of cell cycle genes represented in grey bar in Figure 2A. A) Genes involved in G1 and S phase. (B) Genes involved in G2 and M phase. (C) Genes involved in cell cycle checkpoint and cell cycle arrest. (D) Genes involved in regulation of the cell cycle. Cells were treated with 1.5µg/ml or 3.0µg/ml HtrA4 for 0, 24 or 48h, n=3. Data is expressed as mean  $\pm$  SD. \*p<0.05, \*\*p<0.01, \*\*\*p<0.001, \*\*\*\*p<0.0001.

**A**



**B**



**Supplementary Figure 2.** Full PCR agarose gel electrophoresis images of Figure 3A. (A) Full image of PECAM1 on the right, including negative sample in last lane. (B) Full image of CD45 and CD144. Also included negative sample in last lane for each primer.

Supplementary Table 1

Gene symbol	Accession Number	Primer sequence (5'→3')	Product Size (bp)
AURKA	NM_198433.1	Forward TGACCCCGATCAGTTAAGGA Reverse CGGACAGACACACGCATTTC	197
AURKB	NM_004217	Forward TGGACCTAAAGTTCCCGCT Reverse ACGCACCCGAGTGAATGACA	200
BIRC5	NM_001168.2	Forward CCATCTTAAAACAGACCC Reverse TAACCTGCCATTGGAACTCT	218
BRCA1	NM_007294	Forward GCTGTTGCTTTCTTTGAGGT Reverse CAATCAAGTCTTCACTGCC	196
BRCA2	NM_000059	Forward ATGGAATGAGGTCTTTAGT Reverse TCAAAAGGAAACACCACTCT	192
CCNA2	NM_001237.3	Forward TGGTGGTCTGTGTTCTGTGA Reverse CCATCTGTCTGTGATTTTT	211
CCNB1	NM_031966	Forward TCCTTTTGGTTTACCTGGGG Reverse TAGGGATTCGGTGGTAGACT	216
CCNB2	NM_004701	Forward GCCAAGAATGTGGTGAAAGT Reverse AGAAAAGGGCACAATGAAG	202
CCNF	NM_001761	Forward CCCCCAAATGCTCTTGAACC Reverse CGACAGGACGGGTCTACAGT	196
CDC6	NM_001254	Forward GAACTCCTGACCCTCAAGTG Reverse CCACTGTCTCCAATCTCC	181
CDC20	NM_001255	Forward GGTGGCTGAACTCAAAGGTC Reverse CTGAGGTGATGGGTTGGTCT	216
CDC25A	NM_001789	Forward CTACTCATCCCTGCCCTCTG Reverse GTCCTCTCCCCACATTTTT	217
CDC25C	NM_001790	Forward TGGTGGCAGAGTCTGGAG Reverse AAGAGGGGGAAACAAAGAAG	205
CDK1	NM_001786.4	Forward AAAGCTAACATGAGAGCAT Reverse CGAAAAGCCAAGATAAGCAACT	193
CDK2	NM_001798	Forward CTGAGACAGGGATTGTGCT Reverse CTATGGGGTAGGAGGTGGAC	164
CDKN3	NM_005192.3	Forward ACAGCCTGCGAGACCTAAGA Reverse AACACTGGTGGTTTCATTTTC	218
CKS1B	NM_001826	Forward AGTAGAGCCACCACCACCAT Reverse TCCGAAGTCAACACACATA	220
CKS2	NM_001827	Forward CTGAAGAGGAGTGGAGGAGA Reverse GCACAGGTATGGATGAAAGA	235
E2F1	NM_005225	Forward GCTGTTCTTCTGCCCATAC Reverse TTCACCACCCTCTGCCCA	222
GTSE1	NM_016426	Forward CCTGTTTGGAGCGGGGCATC Reverse TCTGGGGTTGGTGGGGGAT	268
KNTC1	NM_014708	Forward AGGAGTTTGGATTTTGGCA Reverse CAGAATTTACAGGGAGCAG	197
KPNA2	NM_002266	Forward GCCGTGACCAACTATACCAG Reverse TGCTAAGCTCCACATTCT	217
MCM2	NM_004526	Forward GCGTATTCAAGCTGCTTTTG Reverse GATAACTGTGGCAGTGGAT	193
MCM3	NM_002388	Forward TGGGGGCACAACCTGTTTTCT Reverse CATCTCGGATATTCATCTGG	218
MCM4	NM_182746	Forward GCACCCAGCCTTTGTTTTAT Reverse GCCAGGTAACCAAGTATTATTCC	196
MCM5	NM_006739	Forward ACTTCACCAAGCAGAAATAC Reverse GCAGAGGTCCCAGCAACAT	205
MAD2L1	NM_002358	Forward CTGTAGATGGAAAACTTGTGC Reverse AAATGAAGGTCAAAGGAGC	214
MKI67	NM_002417.4	Forward TTGGTACTGGGGGAGGGAGA Reverse TGGGAGGCAGAAAAGTAAAA	188
MRE11A	NM_005591	Forward GCACTGATGGAATCCCTCTA Reverse AACAGGCTGAACCAAATGAA	312
RAD51	NM_002875	Forward TGTAGCAAAGGGAAATGGGTC Reverse GCAGGTAGATGGTGAAGGGC	159
RBL1	NM_183404	Forward GGACCAAGTAAAGAGGAAAG Reverse TGTGCGGGGAAATATAAATG	211
SKP2	NM_005983	Forward ACATTTACAGCCTTTTCGTG Reverse GAGAATCCAGAACACCCAGA	204
STMN1	NM_203401.1	Forward AAGACGCAAGTCCCATGAAG Reverse CCATTTGTGCCTCGGTT	173
TFDP1	NM_007111	Forward CTAACAGCCCCAAGCAAAC Reverse CTCATAGCCGCACCAAGCAT	220
WEE1	NM_003390	Forward CCCTCTTTGGAATGCTGTA Reverse TGTGAAAACTTGAATGTC	251