

**Supplementary Table S1. Sequences of the shRNAs used in this study**

Gene	Target sequence (5'→3')
EXO1-shRNA1	TGCAGACTGCTGCAAAGCTTT
EXO1-shRNA2	AACAAGGTTCTGGGCTATA
ATM-shRNA1	CCTTTCATTCAGCCTTTAGAA
ATM-shRNA2	TGATGGTCTTAAGGAACATCT
ATR-shRNA	CTGTGGTTGTATCTGTTCAAT
FBXO32-shRNA1	CCAAGGAAAGAGCAGTATGGA
FBXO32-shRNA2	GATACCCTTCAGCTCTGCAA
Control shRNA	ACGUGACACGUUCGGAGAATT

**Supplementary Table S2. Sequences of the primers used in this study**

Gene	Primer sequence (5'→3')
<i>EXO1</i>	Forward, TGAGGAAGTATAAAGGGCAGGT
	Reverse, AGTTTTTCAGCACAAAGCAATAGC
<i>ATM</i>	Forward, ATCTGCTGCCGTCAACTAGAA
	Reverse, GATCTCGAATCAGGCGCTTAAA
<i>ATR</i>	Forward, GATTGCAGCAACTCCCTCCT
	Reverse, TCCACAGCATGACCCATCAC
<i>FBXO32</i>	Forward, TGAGCGACCTCAGCAGTTAC
	Reverse, TGCAATATCCATGGCGCTCT
<i>NBS1</i>	Forward, CCGGCAGGAGGAGAACCA
	Reverse, CGGGAAAAGCCATTCTGCAT
<i>BRCA1</i>	Forward, TGATGCCAGCTTCGTGACTT
	Reverse, ATCAAAGGCCACTGTGGAGG
<i>Actin</i>	Forward, GTCACCAACTGGGACGACAT
	Reverse, TAGCAACGTACATGGCTGGG