

Supplementary Table 1. Primers used for PCR and Sequencing

	Forward (alternative)	Reverse (alternative)	Tm(° C)
CDKN1A CDS 1	CTTGTATCTCTGCTGCAGGC**	CGTGCACATGTCCGCACCT**	56
CDKN1A CDS 2	AGTGGACGTTCCCCGAGTTCT**	GGGGGCGGCCAGGGTATGT**	56
CDKN1C CDS 1	ctgccgtccggacgagacagggcgaac* (CCTCTCCTCCTCTCCTTTC)	cacctgcaccgtctcgcggtagaac* (CACCGTCTCGCGGTAGAAC)	58
CDKN1C CDS 2	caaggggaaatgcttacacagcacattg* cattcccaccaggatattcg*	ctcggggctctttgggctctaaactg*	& (68)
CDKN2A/ARF	(TAGCCTGGGCTAGAGACGAA)	ggtcccagctcgcagttaag*	56 (58)
CDKN2A CDS 1	caatttggcagttaggaaggttgc* (accggaggaagaagaggag)	caaacccttctgaaaactcccaggaag* (agaatcgaagcgctacctga)	56
CDKN2A CDS2	gtgtactgaagaatggatagagaactc* (TGGAAGCTCTCAGGGTACAAA)	agggagactcaggcgtcccaccgattg* (CCTGGCTCTGACCATTCTGT)	56
CDKN2A CDS 3	gcgggtacatgcacgtgaagccattg* (TACATGCACGTGAAGCCATT)	gtgagtgtcactccagaaaactccaac* (CAGTTGTGGCCCTGTAGGA)	56
CDKN2B CDS 1	gcgggtacatgcacgtgaagccattg	cgcgtggaatgcacacctccggccaac	55
CDKN2B CDS 2	cagcaaatgaagaacaccagacatc	ctctcctcctgtgagtctcagacag	55
CDKN2C CDS 1	cagcctggttaggagcaaaag	tagaaacccgggtcacgtag	55
CDKN2C CDS 2	tctccgaagaactccatc	cattaaaagtccagagagctactcag	55
CDKN2D CDS 1	gtttcacgcccagcccgaagttc*	ggtcaccaccagggccaggagac*	& (65)
CDKN 2D CDS2	ctagcatttctgtttctgggagatgc (cttccagtgacccttttg)	Caacacctataagccaaaactgtg (tgtttctcccctctctctga)	56 (58)

* (Agarwal *et al.* 2009)

** (McKenzie *et al.* 1997)

& GC-rich region protocol: CG-rich region PCR were performed with Advantage-GC 2 PCR kit (Invitrogen; Grand Island, NY) following vendor's protocol with the modification of the annealing temperature from 65 °C to 68°C

Supplementary Table 2. Primers used for Site-Directed Mutagenesis

Missense Variant	Forward primer	Reverse primer
P15-D86N	acccgaccgggtgcatAatgctgcccgggagg	cctcccgggcagcatTatgcaccggtcgggt
P18-L21H	ggacctagagcaacAtactagtttgttc	gcaacaaactagtaTgttgctctaggcc
P18-T165I	gctgggggagccaTaaatctcaataaacgt	acgtttattgaagatttAtggctccccagc
P21-R9H	accggctggggatgtccAtcagaacccatgc	gcatgggttctgaTggacatccccagccgg
P21-C117Y	acctgtcactgtcttAtacccttgtgcctcg	cgaggcacaagggaTaagacagtgacaggt

Agarwal, S. K., C. M. Mateo, et al. (2009). "Rare germline mutations in cyclin-dependent kinase inhibitor genes in multiple endocrine neoplasia type 1 and related states." J Clin Endocrinol Metab **94**(5): 1826-1834.

McKenzie, K. E., A. Siva, et al. (1997). "Altered WAF1 genes do not play a role in abnormal cell cycle regulation in breast cancers lacking p53 mutations." Clin Cancer Res **3**(9): 1669-1673.