

**S9 Table** The reagents and thermal cycling conditions used for amplification of *EGFR* exon 19, 20, and 21 from cfDNA samples

Methods	PCR reactions			Thermal cycling conditions			
	Reagents	Final concentration	Volume ( $\mu\text{L}$ )	Steps	Temperature ( $^{\circ}\text{C}$ )	Times	Cycle (s)
BDA-based PCR amplification	10 $\times$ Standard <i>Taq</i> Reaction Buffer	1 $\times$	1	Pre-denaturation	95	10 min	1
	10 mM dNTPs	200 $\mu\text{M}$	0.2	Denaturation	95	10 sec	40
	10 $\mu\text{M}$ Forward primer	0.1 $\mu\text{M}$	0.1	Annealing	58	2 min	
	10 $\mu\text{M}$ Reverse primer	0.1 $\mu\text{M}$	0.1	Extension	72	30 sec	
	10 $\mu\text{M}$ Blocker	5 $\mu\text{M}$	5	Final extension	72	10 min	1
	100 U <i>Taq</i> DNA polymerase	0.5 U	0.125				
	Distilled water	-	2.475				
	Template DNA	-	1				
	Total			10			
	PCR barcoding	10 $\times$ Standard <i>Taq</i> Reaction Buffer	1 $\times$	2	Pre-denaturation	95	10 min
10 mM dNTPs		200 $\mu\text{M}$	0.4	Denaturation	95	30 sec	20
10 $\mu\text{M}$ Forward primer		0.2 $\mu\text{M}$	0.25	Annealing	55	1 min	
10 $\mu\text{M}$ Reverse primer		0.2 $\mu\text{M}$	0.25	Extension	68	1 min	
100 U <i>Taq</i> DNA polymerase		0.5 U	0.1	Final extension	68	5 min	1
Distilled water		-	16				
Template DNA		-	1				
Total				20			

BDA, blocker displacement amplification; cfDNA, cell-free DNA; EGFR, epidermal growth factor receptor; PCR, polymerase chain reaction.