## SeCore™ Workflow Quick Reference Card-CE-IVD

#### **Amplification**

- Add DNA (15–30 ng/µL) to the bottom of each tube/ well in the amount indicated to the right.
- Create a mastermix, for N+1 samples, of Amp Mix and Taq using the volumes indicated to the right. Pulse vortex 2-3 times.
- 3. Add mastermix to the wells containing DNA (20  $\mu$ L for Class I reactions and 23  $\mu$ L for Class II reactions).
- Cover and centrifuge briefly. Place plate in thermal cycler.

### ExoSAP-IT® Reagent Cleanup

- 5. Remove 5 µL of PCR product and combine with loading dye. Load onto a 2% agarose gel to check for amplification.
- 6. Add 4  $\mu$ L of ExoSAP-IT reagent to the bottom of each well. Centrifuge ~5 seconds.
- Vortex thoroughly for ~10 seconds. Centrifuge briefly. Place plate in thermal cycler.

## **Sequencing Reactions**

- 8. Add 40  $\mu$ L of ultra pure water to Class II reactions only. Vortex and centrifuge briefly.
- 9. Add 2  $\mu$ L of ExoSAP-IT reagent–treated amplicon to a 96-well optical plate.
- 10. Add 8  $\mu$ L of the appropriate sequencing primer to these same wells. Vortex and centrifuge briefly. Place plate in thermal cycler.

Class I (n=1)		
Amp Mix:	19.8 µL	
Taq:	0.2 μL	
DNA:	5 μL	

Class II (n=1)		
Amp Mix:	22.8 µL	
Taq:	0.2 μL	
DNA:	2 μL	

Cycles	Temperature	Time
1	95°C	4 min
	95°C	20 sec
35	63°C	20 sec
	72°C	40 sec
1	72°C	5 min
1	4°C	∞

Cycles	Temperature	Time
1	37°C	20 min
l	80°C	20 min
1	4°C	∞

Cycles	Temperature	Time	
	95°C	20 sec	
25	50°C	15 sec	
	60°C	60 sec	
1	4°C	∞	

# **Ethanol Precipitation**

- 11. Add 2 µL of PPT buffer to each well. Centrifuge briefly.
- 12. Add 40  $\mu$ L of 100% (absolute) ethanol to each well. Vortex for 1 min.
- 13. Centrifuge for 30 min at 2,000 x g.
- 14. Invert on a paper towel and centrifuge inverted for 10–60 seconds at 500 x g.
- 15. Add 100  $\mu$ L of 70%–80% ethanol to each well. DO NOT vortex.
- 16. Centrifuge for 5 min at 2,000 x g.
- 17. Invert on paper towel and centrifuge inverted for 1 min at 500 x g.
- 18. Add 15 µL of Hi-Di™ Formamide to each pellet.
- 19. Denature the samples at 95°C in a thermal cycler for 2 min.

Instrument	Parameters	<b>POP -6</b> ™ polymer	<b>POP -7</b> ™ polymer
3730/3730xl	Run Module	StdSeq36	FastSeq50
	Injection Time	5 sec	5 sec
	Run Time	1800 sec	1900 sec
3500/3500xL	Run Module	StdSeq50	FastSeq50
	Injection Time	Default	Default
	Run Time	3780 sec	1400 sec
3130/3130 <i>xl</i>	Run Module	RapidSeq36	NA
	Injection Time	10 sec	NA
	Run Time	1800 sec	NA
3500/3500xL	Run Time Run Module Injection Time Run Time Run Module Injection Time	1800 sec StdSeq50 Default 3780 sec RapidSeq36 10 sec	1900 sec FastSeq50 Default 1400 sec NA NA



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