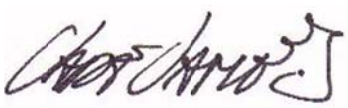
BIOLINE A Meridian Life Science® Company	Certificate of Analysis	COA No: CA BEM-0007
		Version: 01

Velocity DNA Polymerase For Research Use Only	Storage Conditions:	-20°C
	Lot number:	VL-114102
	Expiry date:	February 2016

Quality Control Parameters

Analysis	Specification	Result
Functional	Fragment of size 7Kb is amplified with a dilution series Human Genomic DNA, using standard conditions and 30 cycles. Single distinct bands were observed with agarose gel electrophoresis (ethidium stained). Quantitative PCR analysis amplifying 1 gene from a dilution series of enzyme under standard conditions. Cq and melting profiles must be consistent for the test and reference sample with 0.5+/- Cq variance.	Passed
DNA contamination	Quantitative PCR analysis with no template. Presence of *E. coli* and mouse genomic DNA checked. Test sample must amplify in line with a reference sample.	Passed
DNase contamination	Incubation of a 1Kb double stranded DNA fragment. Incubation for 4 hours at 37°C with dilution series of DNase I. Analysed by agarose gel electrophoresis. Test sample must show less degradation than the limit of detection 2.5 x 10^{-3} U DNase.	Passed

Authorised by Jade James



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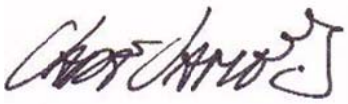
BIOLINE A Meridian Life Science® Company	Certificate of Analysis	COA No: CA BB-0013 Version: 01

5x HiFi Buffer For Research Use Only	Storage Conditions:	-20°C
	Lot number:	VLH-414102
	Expiry date:	February 2016

Quality Control Parameters

Analysis	Specification	Result
Functional	Fragment of size 7Kb was amplified with a dilution series of Velocity Polymerase and a dilution series of human genomic DNA, using standard conditions and 30 cycles. Single distinct bands were observed with agarose gel electrophoresis (ethidium stained).	Passed
DNA contamination	Quantitative PCR analysis with no template. Presence of *E. coli* and mouse genomic DNA checked. Test sample must amplify in line with a reference sample.	Passed
DNase contamination	Incubation of a 1Kb double stranded DNA fragment. Incubation for 4 hours at 37°C with dilution series of DNase I. Analysed by agarose gel electrophoresis. Test sample must show less degradation than the limit of detection 2.5 x 10^{-3} U DNase.	Passed

Authorised by Jade James



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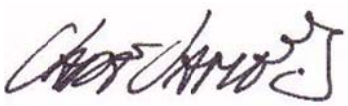
BIOLINE A Meridian Life Science® Company	Certificate of Analysis	COA No: CA CHM-0061 Version: 01

DMSO For Research Use Only	Storage Conditions:	-20˚C
	Lot number:	DSX-414102
	Expiry date:	February 2016

Quality Control Parameters

Analysis	Specification	Result
Purity	≥ 99.9%	Passed
Density (d20 ˚C/20 ˚C)	1.101-1.103	Passed
Refractive index (n 20/D)	1.478-1.479	Passed
Melting point	18.2 ˚C	Passed
Boiling point	188-190 ˚C	Passed

Authorised by Jade James



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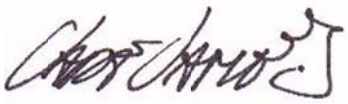
BIOLINE A Meridian Life Science® Company	Certificate of Analysis	COA No: CA BB-0014 Version: 01

$MgCl_2$ Solution, 50mM For Research Use Only	Storage Conditions:	-20°C
	Lot number:	MG-314102
	Expiry date:	February 2016

Quality Control Parameters

Analysis	Specification	Result
Functional	Fragments of sizes 800bp and 3000bp are amplified with a dilution series of BIOTAQ™ DNA Polymerase, using standard conditions and 30 cycles. Single distinct bands were observed with agarose gel electrophoresis (ethidium stained).	Passed
DNA contamination	Quantitative PCR analysis with no template. Presence of *E. coli* and mouse genomic DNA checked. Test sample must amplify in line with a reference sample.	Passed
DNase contamination	Incubation of a 1Kb double stranded DNA fragment. Incubation for 4 hours at 37°C with dilution series of DNase I. Analysed by agarose gel electrophoresis. Test sample must show less degradation than the limit of detection 2.5 x 10^{-3} U DNase.	Passed

Authorised by Jade James



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