



# **Appendix C**



**Calibration/Monitoring Logs** 





Temperature Quality Control Record MOLECULAR GENETICS

Notify the SAC if the temperature is more than SECTION
+/- 5 degrees off the set temperature except refrigerators must not dip below 1 degree C.

Location: Set Temperature:



#### **Equipment:**

#### Number:

200	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept	Oct.	Nov.	Dec
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200	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept	Oct.	Nov.	Dec
30												
31												

forms/qc/tempchrt.wpd

						Balan	ce Check								
Balance:				Number:			Lo	ocation				Yea	r:		
Month: Jan	uary			I	Analyst:		I			<u> </u>	1	1		1	Г
Weight	1 mg	5 mg	10mg	25mg	50mg	100mg	500mg	1g	5g	10g	25g	50g	100g	150g	200g
Reading															
Month: Feb	ruary				Analyst:										
Weight	1 mg	5 mg	10mg	25mg	50mg	100mg	500mg	1g	5g	10g	25g	50g	100g	150g	200g
Reading															
Month: Ma	rch				Analyst:										
Weight	1 mg	5 mg	10mg	25mg	50mg	100mg	500mg	1g	5g	10g	25g	50g	100g	150g	200g
Reading															
Month: Apr	il				Analyst:										
Weight	1 mg	5 mg	10mg	25mg	50mg	100mg	500mg	1g	5g	10g	25g	50g	100g	150g	200g
Reading															
Month: Ma	y				Analyst:										
Weight	1 mg	5 mg	10mg	25mg	50mg	100mg	500mg	1g	5g	10g	25g	50g	100g	150g	200g
Reading															
Month: Jun	e				Analyst:										
Weight	1 mg	5 mg	10mg	25mg	50mg	100mg	500mg	1g	5g	10g	25g	50g	100g	150g	200g
Reading															
Month: July	7				Analyst:			•	•						•
Weight		5 mg	10mg	25mg	50mg	100mg	500mg	1g	5g	10g	25g	50g	100g	150g	200g
Reading															
Month: Aug	gust				Analyst:			•	•						•
Weight	1 mg	5 mg	10mg	25mg	50mg	100mg	500mg	1g	5g	10g	25g	50g	100g	150g	200g
Reading															
Month: Sep	tember			•	Analyst:					•		•	•		
Weight	1 mg	5 mg	10mg	25mg	50mg	100mg	500mg	1g	5g	10g	25g	50g	100g	150g	200g
Reading															
Month: Oct	ober				Analyst:			1	1	1		1	1		1
Weight	1 mg	5 mg	10mg	25mg	50mg	100mg	500mg	1g	5g	10g	25g	50g	100g	150g	200g
Reading															
Month: Nov	vember	1		1	Analyst:		1	1	1	<u> </u>	1			1	ı
Weight	1 mg	5 mg	10mg	25mg	50mg	100mg	500mg	1g	5g	10g	25g	50g	100g	150g	200g
Reading															

Month: December Analyst:

Weight	1 mg	5 mg	10mg	25mg	50mg	100mg	500mg	1g	5g	10g	25g	50g	100g	150g	200g
Reading															

forms/qc/balance.wpd



# NCSBI MOLECULAR GENETICS SECTION

	Temperature Verification Form										
Date Verifie d	Initials	Location	Equipment/SN	Calibrated Thermometer Used/Date Calibration Due (if applicable)	Calibrated Thermometer Reading	Equipment Thermometer Reading					

# **Temperature Monitoring**

The working temperatures of all incubators, water baths, refrigerators, freezers, and heat blocks will be checked either before each use or daily, depending on the application, with a lab or integral digital thermometer. The temperature will be recorded on the Temperature Quality Control Record, and these forms will be maintained by the QC Officer in the Unit.

When necessary, lab and integral thermometers will be calibrated at the working temperature against a National Institute of Standards and Technology certified thermometer.

#### Example Given:

For calibrating a thermometer used in a 56°C water bath (with internal digital thermometer):

- 1. Place both the certified thermometer in the water bath.
- 2. Adjust the temperature of the water bath until the certified thermometer reads 56°C
- Document the temperature readout of the digital water bath thermometer. Note any discrepancies on the "Temperature Quality Control Record".
- 4. If the lab thermometer has a significant difference (± 0.5° C) in temperature with the certified thermometer, the unit must be repaired.

# **Temperature Verification for the Perkin Elmer Thermocyclers**

Use the	manufacture	r's instructio	ns for eac	h of the	different	Perkin	Elmer t	hermocy	clers
in the la	aboratory.							-	

### **MOLECULAR GENETICS SECTION**

## **Thermocycler Verification Log**

Heater Test (Circle One): PassedFailed

Chiller Test (Circle One): PassedFailed

Temperature Calibration Verification Test

T(45): \_\_\_\_\_OK NOT OK

T(85): \_\_\_\_\_ OK NOT OK

### Temperature Non-Uniformity Test:

A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12
B1	B2	В3	B4	B5	В6	В7	В8	В9	B10	B11	B12
C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12
D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	D11	D12
E1	E2	E3	E4	E5	E6	E7	E8	E9	E10	E11	E12
F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12
G1	G2	G3	G4	G5	G6	G7	G8	G9	G10	G11	G12
H1	H2	Н3	H4	Н5	Н6	Н7	Н8	Н9	H10	H11	H12

High T(94)- Low T(94)

High T(37)- Low T(37)

OK NO	T OK			OK	NOT OK	
9700 Thermocycler:	1	2	3			
Analyst:			Date:	 		
Temperature Verific	ation Uni	t Used (I	Unit/SN):			

	on Due:			ECTIO	<u>N</u>		SIX.	DEPARTMENT OF JUSTICE
<b>Therm</b>	ocycler \	Verifica	tion Log				The state of the s	1937 EAU OF INVESTIGE
Heater T	est (Circle	One):	PassedI	Failed				
Chiller T	Test (Circle	e One):	PassedI	Failed				
_	ture Calib				92)	T=	_ OK	NOT OK
Τ	T(56):		5	56°C - T(	(56)	T=	_ OK	NOT OK
Т	T(20):		2	20°C - T(	(20)	T=	_ OK	NOT OK
Tempera	nture Verifi	ication U	niformity '	Γest:				
A1	A2	A3	A4	A5	A6	A7	A8	
B1	B2	В3	В4	В5	В6	В7	В8	
C1	C2	СЗ	C4	C5	C6	C7	C8	
H	High T(95)	- Low T(	95)			High T	(40)- Low	T(40)
C	OK NO	ТОК			OK	ron z	ГОК	
Analyst: _				Da	ate:			

## **MOLECULAR GENETICS SECTION**



## **Thermocycler Verification Log**

Temp	erature C T(40): _					40)0°	С	T=		OK	NOT OK
	T(95): _			9:	5°C - T(	95)1°	С	T=		OK	NOT OK
Temp	erature N	on-Unif	ormity T	est:							
A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12
B1	B2	В3	B4	B5	В6	В7	В8	В9	B10	B11	B12
C1	C2	С3	C4	C5	C6	C7	C8	С9	C10	C11	C12
D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	D11	D12
E1	E2	E3	E4	E5	E6	E7	E8	E9	E10	E11	E12
F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12
G1	G2	G3	G4	G5	G6	G7	G8	G9	G10	G11	G12
Н1	H2	Н3	H4	Н5	Н6	Н7	Н8	Н9	H10	H11	H12
	High T(9	5)- Low T	Γ(95)		•	Hig	h T(40)- I	Low T(40)			
	OK	NOT OK	-			0	K N	от ок			
9600 T	Thermocyc	eler: 1	2 3								
Analys	st:			_ D	ate:						
Tempe	erature Ve	rification	Unit Use	ed (Unit/	SN):						
Calibra	ation Due										

### **CALIBRATED**

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