

Certificate of Calibration

Dated: 23.5.2008

Instrument:

Model Number: **PCR 2400**

Serial Number: **803N5110309**

Customer: Fakultní nemocnice Olomouc

Address: Mgr. Jiří Pavlíček

I.P.Pavlova 6

77521 Olomouc

Chiller and Heater Test

			Specification	Result
Heater Test:	0,97	°C/sec	0.7 - 1.1 °C/sec	Pass
Lag:	1,53	sec	<4.5 sec	Pass
Chiller Test:	2,91	°C/sec	>1.99 °C/sec	Pass
Lag:	1,09	sec	<4.5 sec	Pass
Power @4 °C	19	W	>15 W	Pass

Temperature Accuracy

Instrument target	Probe reading (°C)	Probe / offset corr. (°C)	Actual temp. (°C)	Result
@92 °C (<1 °C)	92,1	0,0	92,1	Pass
@56 °C (<1 °C)	56,1	0,0	56,1	Pass
@20 °C (<1 °C)	20,0	0,0	20,0	Pass

Temperature Uniformity:

Instrument cycled between 94 °C and 37 °C and temperature recorded after 120 seconds at well listed below.

A2	94,1	37,3	A7	94,3	37,3			
B1	93,8	37,3	B4	94,3	37,4	B8	93,9	37,4
C2	94,4	37,3	C7	94,3	37,5			

Uniformity	Max. Variance (°C)	Average temp. (°C)	Result
@37 °C (<1 °C)	0,26	37,35	Pass
@94 °C (<1 °C)	0,65	94,15	Pass

Thermometer Cal. No.: **01D400661**

Calibrations are carried out in accordance with the procedures provided in the *Applied Biosystems* Service Manual for each model of thermal cycler.

Calibration Valid Until: **22.5.2009**

Calibrated By: **Pavol Oravec**



Certificate Number: **000320164649**