

# Temperature Calibration Report for (q)PCR

#### **General information**

Calibration number: 3779-0007

Calibration date: 17-Aug-2019

Start time 14:56 End time 15:08

#### **Device information**

Device name: 聚合酶链反应分析仪 Manufacturer: Applied Biosystems

Type: 7900HT Real-Time PCR System

Print date: 14-Aug-2019

Serial No.: 200811JG0003

Block type: 96 x 0.2mlStandard

Block position: Single
Block serial No.: 279002044

#### **Probe information**

Serial: 140408-03

Probe: Driftcon PLATA 96v-15

Calibration Date: 14-Apr-2014 Uncertainty: 0.25°C (k=2)

#### **User information**

Name: 北京林电伟业电子技术有限公司

Address: 北京市海淀区蓝靛厂南路25号,嘉友国际大厦

803 房间

Calibration number: 3779-0007 Page 1 / 9

# **Porcessing**

Step 1:	30.0℃	Hold 60 seconds
Step 2:	95.0℃	Hold 60 seconds
Step 3:	30.0℃	Hold 60 seconds
Step 4:	90.0℃	Hold 60 seconds
Step 5:	50.0℃	Hold 60 seconds
Step 6:	70.0℃	Hold 60 seconds
Step 7:	60.0℃	Hold 60 seconds
Step 8:	30.0℃	Hold 60 seconds

# **Software information**

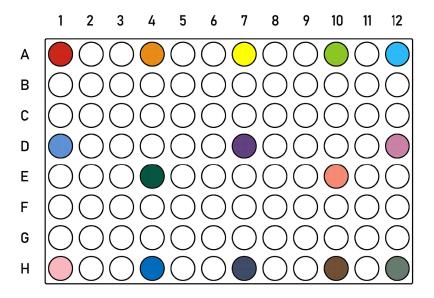
Report created: 20.1.0.0
Report printed: 20.1.0.0
Analysis engine: 20-Dec-2013
Measurement engine 25-Mar-2014
Definitions 22-May-2014

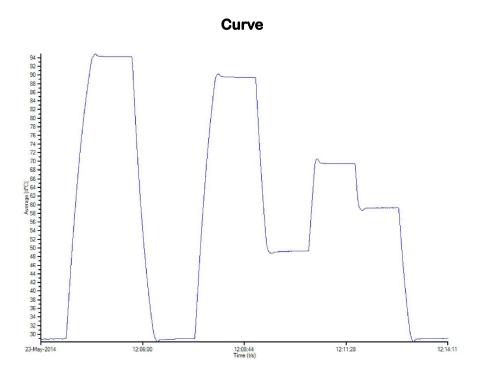
# **Chanel information**

Ch 1	A1	1128 Data	100%
Ch 2	A4	1128 Data	100%
Ch 3	A7	1128 Data	100%
Ch 4	A10	1128 Data	100%
Ch 5	A12	1128 Data	100%
Ch 6	D4	1128 Data	100%
Ch 7	D10	1128 Data	100%
Ch 8	E1	1128 Data	100%
Ch 9	E7	1128 Data	100%
Ch 10	E12	1128 Data	100%
Ch 11	H1	1128 Data	100%
Ch 12	H4	1128 Data	100%
Ch 13	H7	1128 Data	100%
Ch 14	H10	1128 Data	100%
Ch 15	H12	1128 Data	100%

Calibration number: 3779-0007 Page 2 / 9

# **Probe layout**





Temperature: 95.0°C

Plateau start: 10:58:27 (sample170)

#### Values after 30 seconds

		Measured	Deviation (t <sub>90</sub> -t)
Ch 1	A1	93.85℃	1.15℃
Ch 2	A4	94.20℃	-0.80℃
Ch 3	A7	94.03℃	-0.97℃
Ch 4	A10	94.07℃	-0.93℃
Ch 5	A12	94.48℃	-0.52℃
Ch 6	D4	94.27℃	-0.73℃
Ch 7	D10	94.20℃	-0.80℃
Ch 8	E1	94.50℃	-0.50℃
Ch 9	E7	94.23℃	-0.77℃
Ch 10	E12	94.21℃	-0.79℃
Ch 11	H1	94.61℃	+ -0.39℃
Ch 12	H4	94.47℃	-0.53℃
Ch 13	H7	94.13℃	-0.87℃
Ch 14	H10	94.47℃	-0.53℃
Ch 15	H12	94.32℃	-0.68℃

# Step results (n < 50)

Heat rate: 2.12°C/s

Heat rate (50-90°C): 2.11°C/s

Hold time: 71s

Max.overshoot: 103.55°C Avg.overshoot: 101.54°C Avg.heated lid: 103.20°C

#### Accuracy results(n < 50)

15s: 95.62°C

10-20s: 95.40°C

30s: 95.34°C

25-35s: 95.30°C

# Accuracy results(n < 50)

15s: 1.13°C

10-20s: 1.35°C

30s: 0.76°C

25-35s: 0.99°C

Calibration number: 3779-0007 Page 4 / 9

Temperature: 30.0°C

Plateau start: 10:58:27 (sample170)

#### Values after 30 seconds

		Measured	Deviation $(t_{90}$ - $t$ )
Ch 1	A1	28.85℃	1.15℃
Ch 2	A4	29.20℃	-0.80℃
Ch 3	A7	29.03℃	-0.97℃
Ch 4	A10	29.07℃	-0.93℃
Ch 5	A12	29.48℃	-0.52℃
Ch 6	D4	29.27℃	-0.73℃
Ch 7	D10	29.20℃	-0.80℃
Ch 8	E1	29.50℃	-0.50℃
Ch 9	E7	29.23℃	-0.77℃
Ch 10	E12	29.21℃	-0.79℃
Ch 11	H1	29.61℃	+ -0.39℃
Ch 12	H4	29.47℃	-0.53℃
Ch 13	H7	29.13℃	-0.87℃
Ch 14	H10	29.47℃	-0.53℃
Ch 15	H12	29.32℃	-0.68℃

# Step results (n < 50)

Cool rate: 2.12°C/s

Cool rate (90-50°C): 2.11°C/s

Hold time: 69s

Max.undershoot: 27.81°C

Avg. undershoot: 28.29°C

Avg. heated lid: 106.19°C

#### Accuracy results(n < 50)

15s: 30.62°C

10-20s: 30.40°C

30s: 30.34°C

25-35s: 30.30°C

# Accuracy results(n < 50)

15s: 1.13°C

10-20s: 1.35°C

30s: 0.76°C

25-35s: 0.99°C

Calibration number: 3779-0007 Page 5 / 9

Temperature: 90.0°C

Plateau start: 10:58:27 (sample170)

# Values after 30 seconds

		Measured	Deviation $(t_{90}$ - $t$ )
Ch 1	A1	88.85℃	1.15℃
Ch 2	A4	89.20℃	-0.80℃
Ch 3	A7	89.03℃	-0.97℃
Ch 4	A10	89.07℃	-0.93℃
Ch 5	A12	89.48℃	-0.52℃
Ch 6	D4	89.27℃	-0.73℃
Ch 7	D10	89.20℃	-0.80℃
Ch 8	E1	89.50℃	-0.50℃
Ch 9	E7	89.23℃	-0.77℃
Ch 10	E12	89.21℃	-0.79℃
Ch 11	H1	89.61℃	+ -0.39℃
Ch 12	H4	89.47℃	-0.53℃
Ch 13	H7	89.13℃	-0.87℃
Ch 14	H10	89.47℃	-0.53℃
Ch 15	H12	89.32℃	-0.68℃

# Step results (n < 50)

Hold time: 69s

Max.overshoot: 90.86°C Avg. overshoot: 90.24°C Avg. heated lid: 106.19°C

# Accuracy results(n < 50)

15s: 90.62°C

10-20s: 90.40°C

30s: 90.34°C

25-35s: 90.30°C

#### Accuracy results(n < 50)

15s: 1.13°C

10-20s: 1.35°C

30s: 0.76°C

25-35s: 0.99°C

Calibration number: 3779-0007 Page 6 / 9

Temperature: 50.0°C

Plateau start: 10:58:27 (sample170)

# Values after 30 seconds

		Measured	Deviation $(t_{90}$ - $t$ )
Ch 1	A1	48.85℃	1.15℃
Ch 2	A4	49.20℃	-0.80℃
Ch 3	A7	49.03℃	-0.97℃
Ch 4	A10	49.07℃	-0.93℃
Ch 5	A12	49.48℃	-0.52℃
Ch 6	D4	49.27℃	-0.73℃
Ch 7	D10	49.20℃	-0.80℃
Ch 8	E1	49.50℃	-0.50℃
Ch 9	E7	49.23℃	-0.77℃
Ch 10	E12	49.21℃	-0.79℃
Ch 11	H1	49.61℃	+ -0.39℃
Ch 12	H4	49.47℃	-0.53℃
Ch 13	H7	49.13℃	-0.87℃
Ch 14	H10	49.47℃	-0.53℃
Ch 15	H12	49.32℃	-0.68℃

# Step results (n < 50)

Hold time: 69s

Max.undershoot: 48.17°C Avg. undershoot: 48.92°C Avg. heated lid: 106.19°C

# Accuracy results(n < 50)

15s: 49.09°C

10-20s: 49.05°C

30s: 49.20°C

25-35s: 49.20°C

#### Accuracy results(n < 50)

15s: 1.13°C

10-20s: 1.35°C

30s: 0.76°C

25-35s: 0.99°C

Calibration number: 3779-0007 Page 7 / 9

Temperature: 70.0°C

Plateau start: 10:58:27 (sample170)

# Values after 30 seconds

		Measured	Deviation $(t_{90}$ - $t$ )
Ch 1	A1	68.85℃	1.15℃
Ch 2	A4	69.20℃	-0.80℃
Ch 3	A7	69.03℃	-0.97℃
Ch 4	A10	69.07℃	-0.93℃
Ch 5	A12	69.48℃	-0.52℃
Ch 6	D4	69.27℃	-0.73℃
Ch 7	D10	69.20℃	-0.80℃
Ch 8	E1	69.50℃	-0.50℃
Ch 9	E7	69.23℃	-0.77℃
Ch 10	E12	69.21℃	-0.79℃
Ch 11	H1	69.61℃	+ -0.39℃
Ch 12	H4	69.47℃	-0.53℃
Ch 13	H7	69.13℃	-0.87℃
Ch 14	H10	69.47℃	-0.53℃
Ch 15	H12	69.32℃	-0.68℃

# Step results (n < 50)

Hold time: 69s

Max.overshoot: 68.17°C Avg. overshoot: 68.92°C Avg. heated lid: 106.19°C

# Accuracy results(n < 50)

15s: 69.09°C

10-20s: 69.05°C

30s: 69.20°C

25-35s: 69.20°C

#### Accuracy results(n < 50)

15s: 1.13°C

10-20s: 1.35°C

30s: 0.76°C

25-35s: 0.99°C

Calibration number: 3779-0007 Page 8 / 9

Temperature: 60.0°C

Plateau start: 10:58:27 (sample170)

# Values after 30 seconds

		Measured	Deviation $(t_{90}$ - $t$ )
Ch 1	A1	58.85℃	1.15℃
Ch 2	A4	59.20℃	-0.80℃
Ch 3	A7	59.03℃	-0.97℃
Ch 4	A10	59.07℃	-0.93℃
Ch 5	A12	59.48℃	-0.52℃
Ch 6	D4	59.27℃	-0.73℃
Ch 7	D10	59.20℃	-0.80℃
Ch 8	E1	59.50℃	-0.50℃
Ch 9	E7	59.23℃	-0.77℃
Ch 10	E12	59.21℃	-0.79℃
Ch 11	H1	59.61℃	+ -0.39℃
Ch 12	H4	59.47℃	-0.53℃
Ch 13	H7	59.13℃	-0.87℃
Ch 14	H10	59.47℃	-0.53℃
Ch 15	H12	59.32℃	-0.68℃

# Step results (n < 50)

Hold time: 69s

Max.overshoot: 58.17°C
Avg. overshoot: 58.92°C
Avg. heated lid: 106.19°C

# Accuracy results(n < 50)

15s: 59.09°C

10-20s: 59.05°C

30s: 59.20°C

25-35s: 59.20°C

#### Accuracy results(n < 50)

15s: 1.13°C

10-20s: 1.35°C

30s: 0.76°C

25-35s: 0.99°C

Calibration number: 3779-0007 Page 9 / 9