![Bio-Rad logo]

# sam_2023-11-19_08-35-30_Connect.pcrd
## 11/19/2023 11:04

## Report Information

**User:** BioRad/sam
**Data File Name:** sam_2023-11-19 08-35-30_Connect.pcrd
**Data File Path:** C:\Users\Samb\Downloads
**Well Group Name:** All Wells
**Report Differs from Last Save:** No

## Run Setup

### Run Information

**Run Date:** 11/19/2023 08:35
**Run User:** sam
**Run Type:** User-defined
**Plate File:** Sample Plate_96 wells_SYBR.pltd
**ID:**
**Notes:**
**Sample Volume:** 20
**Temperature Control Mode:** Calculated
**Lid Temperature:** 105
**Base Serial Number:** BR006896
**Optical Head Serial Number:** 788BR07000

### Protocol

**1:** 98.0°C for 3:00
**2:** 98.0°C for 0:10
**3:** 60.0°C for 0:30
   Plate Read
**4:** GOTO 2, 39 more times
**5:** Melt Curve 65.0°C to 95.0°C: Increment 0.5°C 0:05
Plate Read

### Plate Display

|   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|----|----|----|
| A | Unk-1 CAcT 1000pg | Unk-1 CAcT 1000pg | Unk-1 CAcT 1000pg | Unk-2 CAcT 100pg | Unk-2 CAcT 100pg | Unk-2 CAcT 100pg | Unk-3 CAcT 10pg | Unk-3 CAcT 10pg | Unk-3 CAcT 10pg | NTC-1 CAcT | NTC-1 CAcT | NTC-1 CAcT |
| B | Unk-4 DAcT 1000pg | Unk-4 DAcT 1000pg | Unk-4 DAcT 1000pg | Unk-5 DAcT 100pg | Unk-5 DAcT 100pg | Unk-5 DAcT 100pg | Unk-6 DAcT 10pg | Unk-6 DAcT 10pg | Unk-6 DAcT 10pg | NTC-2 DAcT | NTC-2 DAcT | NTC-2 DAcT |
| C | Unk-7 Mcap_PaxC 1000pg | Unk-7 Mcap_PaxC 1000pg | Unk-7 Mcap_PaxC 1000pg | Unk-8 Mcap_PaxC 100pg | Unk-8 Mcap_PaxC 100pg | Unk-8 Mcap_PaxC 100pg | Unk-9 Mcap_PaxC 10pg | Unk-9 Mcap_PaxC 10pg | Unk-9 Mcap_PaxC 10pg | NTC-3 Mcap_PaxC | NTC-3 Mcap_PaxC | NTC-3 Mcap_PaxC |
| D | *Unk SYBR | *Unk SYBR | *Unk SYBR | *Unk SYBR | *Unk SYBR | *Unk SYBR | *Unk SYBR | *Unk SYBR | *Unk SYBR | *Unk SYBR | *Unk SYBR | *Unk SYBR |
| E | *Unk SYBR | *Unk SYBR | *Unk SYBR | *Unk SYBR | *Unk SYBR | *Unk SYBR | *Unk SYBR | *Unk SYBR | *Unk SYBR | *Unk SYBR | *Unk SYBR | *Unk SYBR |
| F | *Unk SYBR | *Unk SYBR | *Unk SYBR | *Unk SYBR | *Unk SYBR | *Unk SYBR | *Unk SYBR | *Unk SYBR | *Unk SYBR | *Unk SYBR | *Unk SYBR | *Unk SYBR |

## Plate Display

|   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|----|----|----|
| G | *Unk SYBR | *Unk SYBR | *Unk SYBR | *Unk SYBR | *Unk SYBR | *Unk SYBR | *Unk SYBR | *Unk SYBR | *Unk SYBR | *Unk SYBR | *Unk SYBR | *Unk SYBR |
| H | *Unk SYBR | *Unk SYBR | *Unk SYBR | *Unk SYBR | *Unk SYBR | *Unk SYBR | *Unk SYBR | *Unk SYBR | *Unk SYBR | *Unk SYBR | *Unk SYBR | *Unk SYBR |

## Quantification

**Step #:** 3
**Analysis Mode:** Fluorophore
**Cq Determination:** Single Threshold
**Baseline Method:**
SYBR: Auto Calculated
**Threshold Setting:**
SYBR: 2480.62, Auto Calculated
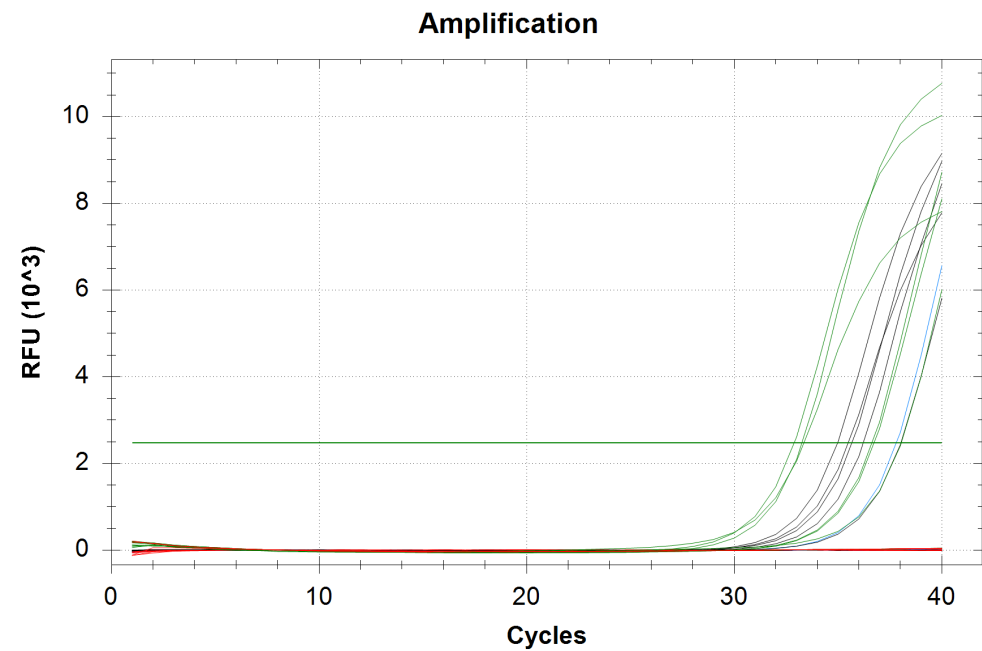


## Quantification Data

| Well | Fluor | Target | Content | Sample | Cq | Cq Mean | Cq Std. Dev |
|------|-------|--------|---------|--------|------|---------|-------------|
| A01 | SYBR | CAcT | Unkn-1 | 1000pg | N/A | 0.00 | 0.000 |
| A02 | SYBR | CAcT | Unkn-1 | 1000pg | N/A | 0.00 | 0.000 |
| A03 | SYBR | CAcT | Unkn-1 | 1000pg | N/A | 0.00 | 0.000 |
| A04 | SYBR | CAcT | Unkn-2 | 100pg | N/A | 0.00 | 0.000 |
| A05 | SYBR | CAcT | Unkn-2 | 100pg | N/A | 0.00 | 0.000 |
| A06 | SYBR | CAcT | Unkn-2 | 100pg | 37.80 | 37.80 | 0.000 |
| A07 | SYBR | CAcT | Unkn-3 | 10pg | N/A | 0.00 | 0.000 |
| A08 | SYBR | CAcT | Unkn-3 | 10pg | N/A | 0.00 | 0.000 |
| A09 | SYBR | CAcT | Unkn-3 | 10pg | N/A | 0.00 | 0.000 |
| A10 | SYBR | CAcT | NTC-1 | | N/A | 0.00 | 0.000 |
| A11 | SYBR | CAcT | NTC-1 | | N/A | 0.00 | 0.000 |
| A12 | SYBR | CAcT | NTC-1 | | N/A | 0.00 | 0.000 |
| B01 | SYBR | DAcT | Unkn-4 | 1000pg | 35.49 | 35.38 | 0.353 |

## Quantification Data

| Well | Fluor | Target | Content | Sample | Cq | Cq Mean | Cq Std. Dev |
|------|-------|--------|---------|--------|------|---------|-------------|
| B02 | SYBR | DAcT | Unkn-4 | 1000pg | 34.99 | 35.38 | 0.353 |
| B03 | SYBR | DAcT | Unkn-4 | 1000pg | 35.67 | 35.38 | 0.353 |
| B04 | SYBR | DAcT | Unkn-5 | 100pg | 38.03 | 37.12 | 1.283 |
| B05 | SYBR | DAcT | Unkn-5 | 100pg | 36.22 | 37.12 | 1.283 |
| B06 | SYBR | DAcT | Unkn-5 | 100pg | N/A | 0.00 | 0.000 |
| B07 | SYBR | DAcT | Unkn-6 | 10pg | N/A | 0.00 | 0.000 |
| B08 | SYBR | DAcT | Unkn-6 | 10pg | N/A | 0.00 | 0.000 |
| B09 | SYBR | DAcT | Unkn-6 | 10pg | N/A | 0.00 | 0.000 |
| B10 | SYBR | DAcT | NTC-2 | | N/A | 0.00 | 0.000 |
| B11 | SYBR | DAcT | NTC-2 | | N/A | 0.00 | 0.000 |
| B12 | SYBR | DAcT | NTC-2 | | N/A | 0.00 | 0.000 |
| C01 | SYBR | Mcap_PaxC | Unkn-7 | 1000pg | 33.36 | 33.17 | 0.247 |
| C02 | SYBR | Mcap_PaxC | Unkn-7 | 1000pg | 32.89 | 33.17 | 0.247 |
| C03 | SYBR | Mcap_PaxC | Unkn-7 | 1000pg | 33.26 | 33.17 | 0.247 |
| C04 | SYBR | Mcap_PaxC | Unkn-8 | 100pg | 38.05 | 37.14 | 0.791 |
| C05 | SYBR | Mcap_PaxC | Unkn-8 | 100pg | 36.73 | 37.14 | 0.791 |
| C06 | SYBR | Mcap_PaxC | Unkn-8 | 100pg | 36.63 | 37.14 | 0.791 |
| C07 | SYBR | Mcap_PaxC | Unkn-9 | 10pg | N/A | 0.00 | 0.000 |
| C08 | SYBR | Mcap_PaxC | Unkn-9 | 10pg | N/A | 0.00 | 0.000 |
| C09 | SYBR | Mcap_PaxC | Unkn-9 | 10pg | N/A | 0.00 | 0.000 |
| C10 | SYBR | Mcap_PaxC | NTC-3 | | N/A | 0.00 | 0.000 |
| C11 | SYBR | Mcap_PaxC | NTC-3 | | N/A | 0.00 | 0.000 |
| C12 | SYBR | Mcap_PaxC | NTC-3 | | N/A | 0.00 | 0.000 |

# Bar Chart

**Normalized expression analysis is not possible, either because no target is assigned as a reference or the selected target(s) is not a**

## Target Names

| Name | Full Name | Reference | Auto Efficiency | Efficiency |
|------|-----------|-----------|-----------------|------------|
| CAcT | CAcT | False | Yes | 100.0% |
| DAcT | DAcT | False | Yes | 100.0% |
| Mcap_PaxC | Mcap_PaxC | False | Yes | 100.0% |

## Sample Names

| Name | Full Name | Control |
|------|-----------|---------|
| 1000pg | 1000pg | No |
| 100pg | 100pg | No |

## Gene Expression - Bar Chart Data

| Target | Sample | Control | Expression | Expression SEM | Corrected Expression SEM | Mean Cq | Cq SEM | P-Value |
|--------|--------|---------|------------|----------------|--------------------------|---------|--------|---------|
| CAcT | 1000pg | | N/A | N/A | N/A | N/A | N/A | N/A |
| CAcT | 100pg | | N/A | N/A | N/A | 37.80 | 0.00000 | N/A |
| CAcT | 10pg | | N/A | N/A | N/A | N/A | N/A | N/A |

Gene Expression - Bar Chart Data

| Target | Sample | Control | Expression | Expression SEM | Corrected Expression SEM | Mean Cq | Cq SEM | P-Value |
|---|---|---|---|---|---|---|---|---|
| DAcT | 1000pg | | N/A | N/A | N/A | 35.38 | 0.20386 | N/A |
| DAcT | 100pg | | N/A | N/A | N/A | 37.12 | 0.90735 | N/A |
| DAcT | 10pg | | N/A | N/A | N/A | N/A | N/A | N/A |
| Mcap_PaxC | 1000pg | | N/A | N/A | N/A | 33.17 | 0.14251 | N/A |
| Mcap_PaxC | 100pg | | N/A | N/A | N/A | 37.14 | 0.45672 | N/A |
| Mcap_PaxC | 10pg | | N/A | N/A | N/A | N/A | N/A | N/A |

# Melt Curve

**Step #:** 5

## Melt Peak
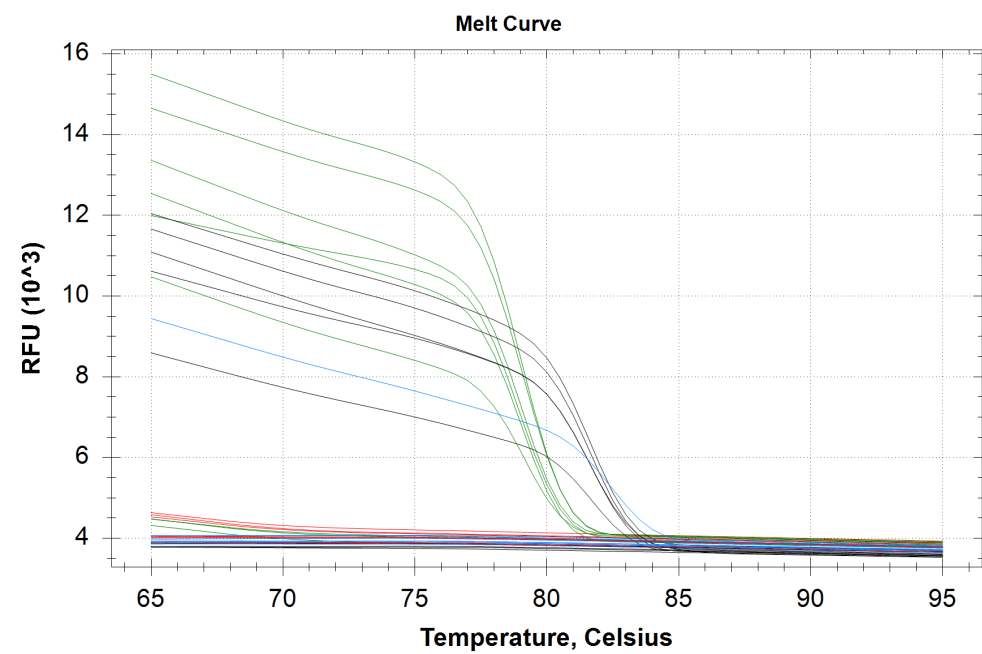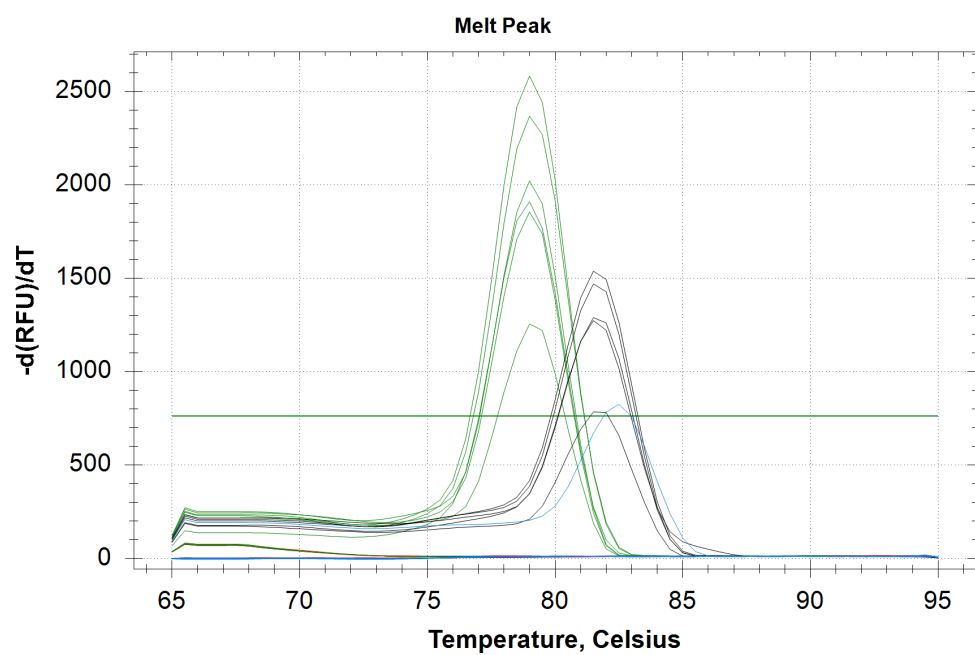


## Melt Curve Data

| Well | Fluor | Target | Content | Sample | Melt Temp |
|------|-------|--------|---------|--------|-----------|
| A01 | SYBR | CAcT | Unkn-1 | 1000pg | None |
| A02 | SYBR | CAcT | Unkn-1 | 1000pg | None |
| A03 | SYBR | CAcT | Unkn-1 | 1000pg | None |
| A04 | SYBR | CAcT | Unkn-2 | 100pg | None |
| A05 | SYBR | CAcT | Unkn-2 | 100pg | None |
| A06 | SYBR | CAcT | Unkn-2 | 100pg | 82.50 |
| A07 | SYBR | CAcT | Unkn-3 | 10pg | None |
| A08 | SYBR | CAcT | Unkn-3 | 10pg | None |
| A09 | SYBR | CAcT | Unkn-3 | 10pg | None |
| A10 | SYBR | CAcT | NTC-1 | | None |
| A11 | SYBR | CAcT | NTC-1 | | None |
| A12 | SYBR | CAcT | NTC-1 | | None |
| B01 | SYBR | DAcT | Unkn-4 | 1000pg | 81.50 |
| B02 | SYBR | DAcT | Unkn-4 | 1000pg | 81.50 |
| B03 | SYBR | DAcT | Unkn-4 | 1000pg | 81.50 |
| B04 | SYBR | DAcT | Unkn-5 | 100pg | 81.50 |
| B05 | SYBR | DAcT | Unkn-5 | 100pg | 81.50 |
| B06 | SYBR | DAcT | Unkn-5 | 100pg | None |
| B07 | SYBR | DAcT | Unkn-6 | 10pg | None |
| B08 | SYBR | DAcT | Unkn-6 | 10pg | None |
| B09 | SYBR | DAcT | Unkn-6 | 10pg | None |
| B10 | SYBR | DAcT | NTC-2 | | None |
| B11 | SYBR | DAcT | NTC-2 | | None |
| B12 | SYBR | DAcT | NTC-2 | | None |
| C01 | SYBR | Mcap_PaxC | Unkn-7 | 1000pg | 79.00 |
| C02 | SYBR | Mcap_PaxC | Unkn-7 | 1000pg | 79.00 |
| C03 | SYBR | Mcap_PaxC | Unkn-7 | 1000pg | 79.00 |
| C04 | SYBR | Mcap_PaxC | Unkn-8 | 100pg | 79.00 |
| C05 | SYBR | Mcap_PaxC | Unkn-8 | 100pg | 79.00 |

## Melt Curve Data

| Well | Fluor | Target | Content | Sample | Melt Temp |
|------|-------|--------|---------|--------|-----------|
| C06 | SYBR | Mcap_PaxC | Unkn-8 | 100pg | 79.00 |
| C07 | SYBR | Mcap_PaxC | Unkn-9 | 10pg | None |
| C08 | SYBR | Mcap_PaxC | Unkn-9 | 10pg | None |
| C09 | SYBR | Mcap_PaxC | Unkn-9 | 10pg | None |
| C10 | SYBR | Mcap_PaxC | NTC-3 | | None |
| C11 | SYBR | Mcap_PaxC | NTC-3 | | None |
| C12 | SYBR | Mcap_PaxC | NTC-3 | | None |

# QC Parameters

## Data

| Description | Value | Use | Results | Exclude Wells | All excluded wells |
|-------------|-------|-----|---------|---------------|--------------------|
| Negative control with a Cq less than | 38 | True | | False | |
| NTC with a Cq less than | 38 | True | | False | |
| NRT with a Cq less than | 38 | True | | False | |
| Positive control with a Cq greater than | 30 | True | | False | |
| Unknown without a Cq | N/A | True | SYBR:A1, A2, A3, A4, A5, A7, A8, A9, B6, B7, B8, B9, C7, C8, C9. | False | |
| Standard without a Cq | N/A | True | | False | |
| Efficiency greater than | 110.0 | True | | | |
| Efficiency less than | 90.0 | True | | | |
| Std Curve R^2 less than | 0.980 | True | | | |
| Replicate group Cq Std Dev greater than | 0.20 | True | SYBR:B1, B2, B3, B4, B5, C1, C2, C3, C4, C5, C6. | False | |