

# sam\_2024-03-25\_06-10-54\_Connect.pcrd

03/25/2024 08:26

#### **Report Information**

User: BioRad/sam

**Data File Name:** sam\_2024-03-25\_06-10-54\_Connect.pcrd

**Data File Path:** \\owl.fish.washington.edu\\web\\scaphapoda\\qPCR\_data\\cfx\_connect\_data

Well Group Name: All Wells Report Differs from Last Save: Yes

#### Run Setup

#### **Run Information**

Run Date: 03/25/2024 06:11

Run User: sam

Run Type: User-defined

Plate File: 20240325-cgig-carryover-ATPsynthase-HSP70.pltd

ID: Notes:

Sample Volume: 20

Temperature Control Mode: Calculated

Lid Temperature: 105

Base Serial Number: BR006896

Optical Head Serial Number: 788BR07000

#### Protocol

1: 95.0°C for 0:30 2: 95.0°C for 0:03 3: 60.0°C for 0:05

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
Α	Unk-1	Unk-1	Unk-2	Unk-2	Unk-3	Unk-3	Unk-4	Unk-4	Unk-5	Unk-5	Unk-6	Unk-6
	ATPsynthas	ATPsynthas	ATPsynthas	ATPsynthas	ATPsynthas							
	e	e	e	e	e	e	e	e	e	e	e	e
	206	206	220	220	226	226	242	242	253	253	282	282
E	Unk-7	Unk-7	Unk-8	Unk-8	Unk-9	Unk-9	Unk-10	Unk-10	Unk-11	Unk-11	Unk-12	Unk-12
	ATPsynthas	ATPsynthas	ATPsynthas	ATPsynthas	ATPsynthas							
	e	e	e	e	e	e	e	e	e	e	e	e
	284	284	289	289	296	296	298	298	200	200	223	223
C	Unk-13 ATPsynthas e 243	Unk-13 ATPsynthas e 243	Unk-14 ATPsynthas e 244	Unk-14 ATPsynthas e 244	Unk-15 ATPsynthas e 257	Unk-15 ATPsynthas e 257	Unk-16 ATPsynthas e 285	Unk-16 ATPsynthas e 285	NTC-1 ATPsynthas e	NTC-1 ATPsynthas e		
С	Unk-17	Unk-17	Unk-18	Unk-18	Unk-19	Unk-19	Unk-20	Unk-20	Unk-21	Unk-21	Unk-22	Unk-22
	HSP70	HSP70	HSP70	HSP70	HSP70							
	206	206	220	220	226	226	242	242	253	253	282	282

### Plate Display

	1	2	3	4	5	6	7	8	9	10	11	12
E	Unk-23 HSP70 284	Unk-23 HSP70 284	Unk-24 HSP70 289	Unk-24 HSP70 289	Unk-25 HSP70 296	Unk-25 HSP70 296	Unk-26 HSP70 298	Unk-26 HSP70 298	Unk-27 HSP70 200	Unk-27 HSP70 200	Unk-28 HSP70 223	Unk-28 HSP70 223
F	Unk-29 HSP70 243	Unk-29 HSP70 243	Unk-30 HSP70 244	Unk-30 HSP70 244	Unk-31 HSP70 257	Unk-31 HSP70 257	Unk-32 HSP70 285	Unk-32 HSP70 285	NTC-2 HSP70	NTC-2 HSP70		
G												
Н												

## Quantification

**Step #:** 3

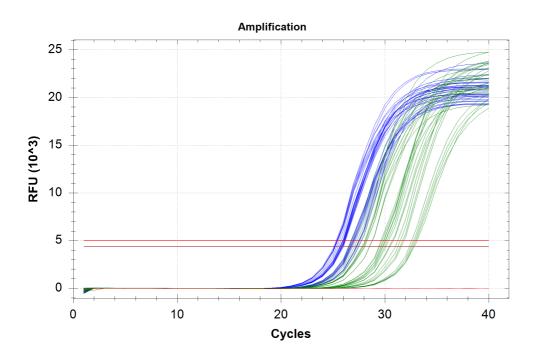
Analysis Mode: Target

Cq Determination: Single Threshold

Baseline Method: HSP70: Auto Calculated ATPsynthase: Auto Calculated

**Threshold Setting:** 

HSP70: 5015.50, Auto Calculated ATPsynthase: 4388.29, Auto Calculated



### Quantification Data

Well	Fluor	Target	Content	Sample	Cq	Cq Mean	Cq Std. Dev
A01	SYBR	ATPsynthase	Unkn-01	206	26.72	26.69	0.046
A02	SYBR	ATPsynthase	Unkn-01	206	26.66	26.69	0.046
A03	SYBR	ATPsynthase	Unkn-02	220	25.83	25.85	0.024
A04	SYBR	ATPsynthase	Unkn-02	220	25.87	25.85	0.024
A05	SYBR	ATPsynthase	Unkn-03	226	25.09	25.15	0.081
A06	SYBR	ATPsynthase	Unkn-03	226	25.21	25.15	0.081
A07	SYBR	ATPsynthase	Unkn-04	242	27.30	27.26	0.055
A08	SYBR	ATPsynthase	Unkn-04	242	27.22	27.26	0.055

### Quantification Data

Well	Fluor	Target	Content	Sample	Cq	Cq	Cq
						Mean	Std. Dev
A09	SYBR	ATPsynthase	Unkn-05	253	25.69	25.71	0.031
A10	SYBR	ATPsynthase	Unkn-05	253	25.73	25.71	0.031
A11	SYBR	ATPsynthase	Unkn-06	282	25.66	25.69	0.037
A12	SYBR	ATPsynthase	Unkn-06	282	25.72	25.69	0.037
B01	SYBR	ATPsynthase	Unkn-07	284	25.95	25.94	0.021
B02	SYBR	ATPsynthase	Unkn-07	284	25.92	25.94	0.021
B03	SYBR	ATPsynthase	Unkn-08	289	26.72	26.67	0.066
B04	SYBR	ATPsynthase	Unkn-08	289	26.63	26.67	0.066
B05	SYBR	ATPsynthase	Unkn-09	296	26.81	26.85	0.061
B06	SYBR	ATPsynthase	Unkn-09	296	26.89	26.85	0.061
B07	SYBR	ATPsynthase	Unkn-10	298	26.50	26.52	0.020
B08	SYBR	ATPsynthase	Unkn-10	298	26.53	26.52	0.020
B09	SYBR	ATPsynthase	Unkn-11	200	25.14	25.18	0.020
B10	SYBR	-	Unkn-11	200	25.22	25.18	0.055
B10		ATPsynthase	Unkn-12		25.95		
	SYBR	ATPsynthase		223		25.98	0.049
B12	SYBR	ATPsynthase	Unkn-12	223	26.02	25.98	0.049
C01	SYBR	ATPsynthase	Unkn-13	243	27.26	27.37	0.153
C02	SYBR	ATPsynthase	Unkn-13	243	27.48	27.37	0.153
C03	SYBR	ATPsynthase	Unkn-14	244	25.35	25.43	0.111
C04	SYBR	ATPsynthase	Unkn-14	244	25.51	25.43	0.111
C05	SYBR	ATPsynthase	Unkn-15	257	25.19	25.18	0.005
C06	SYBR	ATPsynthase	Unkn-15	257	25.18	25.18	0.005
C07	SYBR	ATPsynthase	Unkn-16	285	25.80	25.84	0.056
C08	SYBR	ATPsynthase	Unkn-16	285	25.88	25.84	0.056
C09	SYBR	ATPsynthase	NTC-01		N/A	0.00	0.000
C10	SYBR	ATPsynthase	NTC-01		N/A	0.00	0.000
D01	SYBR	HSP70	Unkn-17	206	33.01	32.95	0.085
D02	SYBR	HSP70	Unkn-17	206	32.89	32.95	0.085
D03	SYBR	HSP70	Unkn-18	220	26.80	26.91	0.153
D04	SYBR	HSP70	Unkn-18	220	27.01	26.91	0.153
D05	SYBR	HSP70	Unkn-19	226	28.78	28.79	0.013
D06	SYBR	HSP70	Unkn-19	226	28.80	28.79	0.013
D07	SYBR	HSP70	Unkn-20	242	28.14	28.15	0.002
D08	SYBR	HSP70	Unkn-20	242	28.15	28.15	0.002
D09	SYBR	HSP70	Unkn-21	253	28.08	28.11	0.053
D10	SYBR	HSP70	Unkn-21	253	28.15	28.11	0.053
D11	SYBR	HSP70	Unkn-22	282	30.71	30.76	0.062
D12	SYBR	HSP70	Unkn-22	282	30.80	30.76	0.062
E01	SYBR	HSP70	Unkn-23	284	31.24	31.36	0.171
E02	SYBR	HSP70	Unkn-23	284	31.48	31.36	0.171
E03	SYBR	HSP70	Unkn-24	289	29.88	29.98	0.129
E04	SYBR	HSP70	Unkn-24	289	30.07	29.98	0.129
E05	SYBR	HSP70	Unkn-25	296	27.73	27.64	0.126
E06	SYBR	HSP70	Unkn-25	296	27.55	27.64	0.126
E07	SYBR	HSP70	Unkn-26	298	30.03	30.12	0.131
E08	SYBR	HSP70	Unkn-26	298	30.22	30.12	0.131
		******		200			
E09	SYBR	HSP70	Unkn-27	200	31.84	31.78	0.097
E09 E10	SYBR SYBR	HSP70 HSP70	Unkn-27 Unkn-27	200	31.84	31.78	0.097

#### Quantification Data

Well	Fluor	Target	Content	Sample	Cq	Cq Mean	Cq Std. Dev
E12	SYBR	HSP70	Unkn-28	223	30.37	30.11	0.356
F01	SYBR	HSP70	Unkn-29	243	32.75	32.66	0.125
F02	SYBR	HSP70	Unkn-29	243	32.58	32.66	0.125
F03	SYBR	HSP70	Unkn-30	244	33.10	30.22	4.084
F04	SYBR	HSP70	Unkn-30	244	27.33	30.22	4.084
F05	SYBR	HSP70	Unkn-31	257	28.28	28.27	0.007
F06	SYBR	HSP70	Unkn-31	257	28.27	28.27	0.007
F07	SYBR	HSP70	Unkn-32	285	29.62	29.67	0.066
F08	SYBR	HSP70	Unkn-32	285	29.72	29.67	0.066
F09	SYBR	HSP70	NTC-02		N/A	0.00	0.000
F10	SYBR	HSP70	NTC-02		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
ATPsynthase	ATPsynthase	False	Yes	100.0%
HSP70	HSP70	False	Yes	100.0%

#### Sample Names

Name	Full Name	Control
200	200	No
206	206	No
220	220	No
223	223	No
226	226	No
242	242	No
243	243	No
244	244	No
253	253	No
257	257	No
282	282	No
284	284	No
285	285	No
289	289	No
296	296	No
298	298	No

### Gene Expression - Bar Chart Data

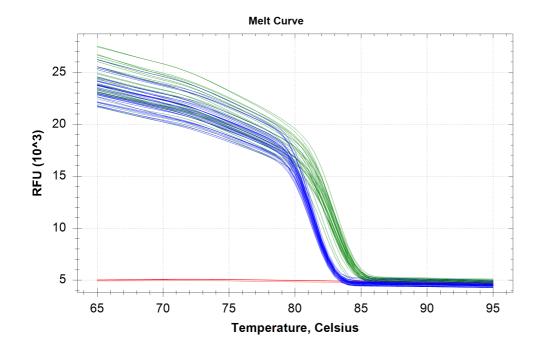
Target	Sample	Control	Expression	Expression SEM	Corrected Expression SEM		Cq SEM	P-Value
ATPsynthase	200		N/A	N/A	N/A	25.18	0.03910	N/A
ATPsynthase	206		N/A	N/A	N/A	26.69	0.03220	N/A

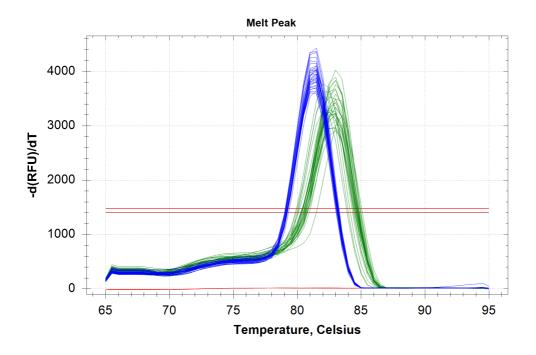
## Gene Expression - Bar Chart Data

Target	Sample	Control	Expression	Expression SEM	Corrected Expression SEM	Mean Cq	Cq SEM	P-Value
ATPsynthase	220		N/A	N/A	N/A	25.85	0.01690	N/A
ATPsynthase	223		N/A	N/A	N/A	25.98	0.03448	N/A
ATPsynthase	226		N/A	N/A	N/A	25.15	0.05748	N/A
ATPsynthase	242		N/A	N/A	N/A	27.26	0.03871	N/A
ATPsynthase	243		N/A	N/A	N/A	27.37	0.10835	N/A
ATPsynthase	244		N/A	N/A	N/A	25.43	0.07840	N/A
ATPsynthase	253		N/A	N/A	N/A	25.71	0.02203	N/A
ATPsynthase	257		N/A	N/A	N/A	25.18	0.00340	N/A
ATPsynthase	282		N/A	N/A	N/A	25.69	0.02589	N/A
ATPsynthase	284		N/A	N/A	N/A	25.94	0.01507	N/A
ATPsynthase	285		N/A	N/A	N/A	25.84	0.03926	N/A
ATPsynthase	289		N/A	N/A	N/A	26.67	0.04680	N/A
ATPsynthase	296		N/A	N/A	N/A	26.85	0.04307	N/A
ATPsynthase	298		N/A	N/A	N/A	26.52	0.01431	N/A
HSP70	200		N/A	N/A	N/A	31.78	0.06846	N/A
HSP70	206		N/A	N/A	N/A	32.95	0.06021	N/A
HSP70	220		N/A	N/A	N/A	26.91	0.10790	N/A
HSP70	223		N/A	N/A	N/A	30.11	0.25175	N/A
HSP70	226		N/A	N/A	N/A	28.79	0.00939	N/A
HSP70	242		N/A	N/A	N/A	28.15	0.00109	N/A
HSP70	243		N/A	N/A	N/A	32.66	0.08813	N/A
HSP70	244		N/A	N/A	N/A	30.22	2.88774	N/A
HSP70	253		N/A	N/A	N/A	28.11	0.03766	N/A
HSP70	257		N/A	N/A	N/A	28.27	0.00472	N/A
HSP70	282		N/A	N/A	N/A	30.76	0.04362	N/A
HSP70	284		N/A	N/A	N/A	31.36	0.12067	N/A
HSP70	285		N/A	N/A	N/A	29.67	0.04699	N/A
HSP70	289		N/A	N/A	N/A	29.98	0.09138	N/A
HSP70	296		N/A	N/A	N/A	27.64	0.08882	N/A
HSP70	298		N/A	N/A	N/A	30.12	0.09278	N/A

Melt Curve

**Step #:** 5





#### Melt Curve Data

Well	Fluor	Target	Content	Sample	Melt Temp
A01	SYBR	ATPsynthase	Unkn-01	206	81.50
A02	SYBR	ATPsynthase	Unkn-01	206	81.50
A03	SYBR	ATPsynthase	Unkn-02	220	81.50
A04	SYBR	ATPsynthase	Unkn-02	220	81.50
A05	SYBR	ATPsynthase	Unkn-03	226	81.50
A06	SYBR	ATPsynthase	Unkn-03	226	81.50
A07	SYBR	ATPsynthase	Unkn-04	242	81.50
A08	SYBR	ATPsynthase	Unkn-04	242	81.50
A09	SYBR	ATPsynthase	Unkn-05	253	81.50

### Melt Curve Data

Well	Fluor	Target	Content	Sample	Melt Temp
A10	SYBR	ATPsynthase	Unkn-05	253	81.50
A11	SYBR	ATPsynthase	Unkn-06	282	81.50
A12	SYBR	ATPsynthase	Unkn-06	282	81.50
B01	SYBR	ATPsynthase	Unkn-07	284	81.50
B02	SYBR	ATPsynthase	Unkn-07	284	81.50
B03	SYBR	ATPsynthase	Unkn-08	289	81.50
B04	SYBR	ATPsynthase	Unkn-08	289	81.50
B05	SYBR	ATPsynthase	Unkn-09	296	81.50
B06	SYBR	ATPsynthase	Unkn-09	296	81.50
B07	SYBR	ATPsynthase	Unkn-10	298	81.00
B08	SYBR	ATPsynthase	Unkn-10	298	81.00
B09	SYBR	ATPsynthase	Unkn-11	200	81.50
B10	SYBR	ATPsynthase	Unkn-11	200	81.50
B11	SYBR	ATPsynthase	Unkn-12	223	81.50
B12	SYBR	ATPsynthase	Unkn-12	223	81.50
C01	SYBR	ATPsynthase	Unkn-13	243	81.50
C02	SYBR	ATPsynthase	Unkn-13	243	81.50
C03	SYBR	ATPsynthase	Unkn-14	244	81.50
C04	SYBR	ATPsynthase	Unkn-14	244	81.50
C05	SYBR	ATT synthase	Unkn-15	257	81.50
C06	SYBR	ATPsynthase	Unkn-15	257	81.50
C07	SYBR	ATPsynthase	Unkn-16	285	81.00
C08	SYBR	ATT synthase	Unkn-16	285	81.00
C09	SYBR	ATT synthase	NTC-01	263	None
C10	SYBR	ATPsynthase	NTC-01		None
D01	SYBR	HSP70	Unkn-17	206	83.00
D01	SYBR	HSP70	Unkn-17	206	83.00
D02	SYBR	HSP70	Unkn-18	220	82.50
D04	SYBR	HSP70	Unkn-18	220	82.50
D05 D06	SYBR	HSP70	Unkn-19	226 226	83.00
	SYBR	HSP70	Unkn-19		83.00
D07	SYBR	HSP70	Unkn-20	242	83.00
D08	SYBR	HSP70	Unkn-20	242	83.00
D09	SYBR	HSP70	Unkn-21	253	83.00
D10	SYBR	HSP70	Unkn-21	253	83.00
D11	SYBR	HSP70	Unkn-22	282	82.50
D12	SYBR	HSP70	Unkn-22	282	82.50
E01	SYBR	HSP70	Unkn-23	284	83.00
E02	SYBR	HSP70	Unkn-23	284	83.00
E03	SYBR	HSP70	Unkn-24	289	83.00
E04	SYBR	HSP70	Unkn-24	289	83.00
E05	SYBR	HSP70	Unkn-25	296	83.00
E06	SYBR	HSP70	Unkn-25	296	83.00
E07	SYBR	HSP70	Unkn-26	298	83.00
E08	SYBR	HSP70	Unkn-26	298	83.00
E09	SYBR	HSP70	Unkn-27	200	82.00
E10	SYBR	HSP70	Unkn-27	200	82.50
E11	SYBR	HSP70	Unkn-28	223	82.50
E12	SYBR	HSP70	Unkn-28	223	83.00
F01	SYBR	HSP70	Unkn-29	243	83.00

### Melt Curve Data

Well	Fluor	Target	Content	Sample	Melt Temp
F02	SYBR	HSP70	Unkn-29	243	83.00
F03	SYBR	HSP70	Unkn-30	244	83.50
F04	SYBR	HSP70	Unkn-30	244	83.00
F05	SYBR	HSP70	Unkn-31	257	82.00
F06	SYBR	HSP70	Unkn-31	257	82.00
F07	SYBR	HSP70	Unkn-32	285	83.00
F08	SYBR	HSP70	Unkn-32	285	83.00
F09	SYBR	HSP70	NTC-02		None
F10	SYBR	HSP70	NTC-02		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		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	HSP70:E11, E12, F3, F4.	False	