



# sam\_2024-12-10\_14-48-30\_Connect-ATP\_synthase-01.pcrd

12/12/2024 14:34

## Report Information

User: BioRad/sam  
Data File Name: sam\_2024-12-10\_14-48-30\_Connect-ATP\_synthase-01.pcrd  
Data File Path: C:\Users\Samb\Downloads\lifestage-pcrs  
Well Group Name: All Wells  
Report Differs from Last Save: No

## Run Setup

### Run Information

Run Date: 12/10/2024 14:48  
Run User: sam  
Run Type: User-defined  
Plate File: cgig-ATP\_synthase-cfx-plate-01.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

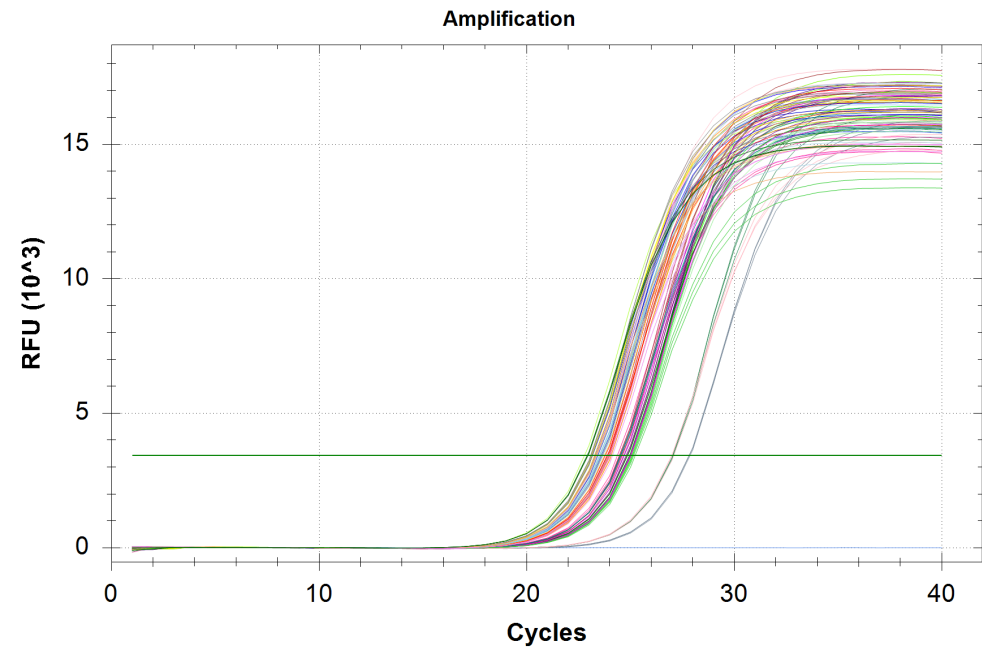
	1	2	3	4	5	6	7	8	9	10	11	12
A	Unk-1 Cg_ATPsyn thase_F/R (SR IDs: 1385/6) 201	Unk-1 Cg_ATPsyn thase_F/R (SR IDs: 1385/6) 201	Unk-1 Cg_ATPsyn thase_F/R (SR IDs: 1385/6) 201	Unk-2 Cg_ATPsyn thase_F/R (SR IDs: 1385/6) 202	Unk-2 Cg_ATPsyn thase_F/R (SR IDs: 1385/6) 202	Unk-2 Cg_ATPsyn thase_F/R (SR IDs: 1385/6) 202	Unk-3 Cg_ATPsyn thase_F/R (SR IDs: 1385/6) 203	Unk-3 Cg_ATPsyn thase_F/R (SR IDs: 1385/6) 203	Unk-3 Cg_ATPsyn thase_F/R (SR IDs: 1385/6) 203	Unk-4 Cg_ATPsyn thase_F/R (SR IDs: 1385/6) 204	Unk-4 Cg_ATPsyn thase_F/R (SR IDs: 1385/6) 204	Unk-4 Cg_ATPsyn thase_F/R (SR IDs: 1385/6) 204
B	Unk-5 Cg_ATPsyn thase_F/R (SR IDs: 1385/6) 205	Unk-5 Cg_ATPsyn thase_F/R (SR IDs: 1385/6) 205	Unk-5 Cg_ATPsyn thase_F/R (SR IDs: 1385/6) 205	Unk-6 Cg_ATPsyn thase_F/R (SR IDs: 1385/6) 207	Unk-6 Cg_ATPsyn thase_F/R (SR IDs: 1385/6) 207	Unk-6 Cg_ATPsyn thase_F/R (SR IDs: 1385/6) 207	Unk-7 Cg_ATPsyn thase_F/R (SR IDs: 1385/6) 208	Unk-7 Cg_ATPsyn thase_F/R (SR IDs: 1385/6) 208	Unk-7 Cg_ATPsyn thase_F/R (SR IDs: 1385/6) 208	Unk-8 Cg_ATPsyn thase_F/R (SR IDs: 1385/6) 209	Unk-8 Cg_ATPsyn thase_F/R (SR IDs: 1385/6) 209	Unk-8 Cg_ATPsyn thase_F/R (SR IDs: 1385/6) 209

Plate Display

	1	2	3	4	5	6	7	8	9	10	11	12
C	Unk-9 Cg_ATPSyn thase_F/R (SR IDs: 1385/6) 213	Unk-9 Cg_ATPSyn thase_F/R (SR IDs: 1385/6) 213	Unk-9 Cg_ATPSyn thase_F/R (SR IDs: 1385/6) 213	Unk-10 Cg_ATPSyn thase_F/R (SR IDs: 1385/6) 214	Unk-10 Cg_ATPSyn thase_F/R (SR IDs: 1385/6) 214	Unk-10 Cg_ATPSyn thase_F/R (SR IDs: 1385/6) 214	Unk-11 Cg_ATPSyn thase_F/R (SR IDs: 1385/6) 216	Unk-11 Cg_ATPSyn thase_F/R (SR IDs: 1385/6) 216	Unk-11 Cg_ATPSyn thase_F/R (SR IDs: 1385/6) 216	Unk-12 Cg_ATPSyn thase_F/R (SR IDs: 1385/6) 219	Unk-12 Cg_ATPSyn thase_F/R (SR IDs: 1385/6) 219	Unk-12 Cg_ATPSyn thase_F/R (SR IDs: 1385/6) 219
D	Unk-13 Cg_ATPSyn thase_F/R (SR IDs: 1385/6) 227	Unk-13 Cg_ATPSyn thase_F/R (SR IDs: 1385/6) 227	Unk-13 Cg_ATPSyn thase_F/R (SR IDs: 1385/6) 227	Unk-14 Cg_ATPSyn thase_F/R (SR IDs: 1385/6) 229	Unk-14 Cg_ATPSyn thase_F/R (SR IDs: 1385/6) 229	Unk-14 Cg_ATPSyn thase_F/R (SR IDs: 1385/6) 229	Unk-15 Cg_ATPSyn thase_F/R (SR IDs: 1385/6) 230	Unk-15 Cg_ATPSyn thase_F/R (SR IDs: 1385/6) 230	Unk-15 Cg_ATPSyn thase_F/R (SR IDs: 1385/6) 230	Unk-16 Cg_ATPSyn thase_F/R (SR IDs: 1385/6) 231	Unk-16 Cg_ATPSyn thase_F/R (SR IDs: 1385/6) 231	Unk-16 Cg_ATPSyn thase_F/R (SR IDs: 1385/6) 231
E	Unk-17 Cg_ATPSyn thase_F/R (SR IDs: 1385/6) 232	Unk-17 Cg_ATPSyn thase_F/R (SR IDs: 1385/6) 232	Unk-17 Cg_ATPSyn thase_F/R (SR IDs: 1385/6) 232	Unk-18 Cg_ATPSyn thase_F/R (SR IDs: 1385/6) 233	Unk-18 Cg_ATPSyn thase_F/R (SR IDs: 1385/6) 233	Unk-18 Cg_ATPSyn thase_F/R (SR IDs: 1385/6) 233	Unk-19 Cg_ATPSyn thase_F/R (SR IDs: 1385/6) 235	Unk-19 Cg_ATPSyn thase_F/R (SR IDs: 1385/6) 235	Unk-19 Cg_ATPSyn thase_F/R (SR IDs: 1385/6) 235	Unk-20 Cg_ATPSyn thase_F/R (SR IDs: 1385/6) 236	Unk-20 Cg_ATPSyn thase_F/R (SR IDs: 1385/6) 236	Unk-20 Cg_ATPSyn thase_F/R (SR IDs: 1385/6) 236
F	Unk-21 Cg_ATPSyn thase_F/R (SR IDs: 1385/6) 237	Unk-21 Cg_ATPSyn thase_F/R (SR IDs: 1385/6) 237	Unk-21 Cg_ATPSyn thase_F/R (SR IDs: 1385/6) 237	Unk-22 Cg_ATPSyn thase_F/R (SR IDs: 1385/6) 238	Unk-22 Cg_ATPSyn thase_F/R (SR IDs: 1385/6) 238	Unk-22 Cg_ATPSyn thase_F/R (SR IDs: 1385/6) 238	Unk-23 Cg_ATPSyn thase_F/R (SR IDs: 1385/6) 239	Unk-23 Cg_ATPSyn thase_F/R (SR IDs: 1385/6) 239	Unk-23 Cg_ATPSyn thase_F/R (SR IDs: 1385/6) 239	Unk-24 Cg_ATPSyn thase_F/R (SR IDs: 1385/6) 240	Unk-24 Cg_ATPSyn thase_F/R (SR IDs: 1385/6) 240	Unk-24 Cg_ATPSyn thase_F/R (SR IDs: 1385/6) 240
G	Unk-25 Cg_ATPSyn thase_F/R (SR IDs: 1385/6) 241	Unk-25 Cg_ATPSyn thase_F/R (SR IDs: 1385/6) 241	Unk-25 Cg_ATPSyn thase_F/R (SR IDs: 1385/6) 241	Unk-26 Cg_ATPSyn thase_F/R (SR IDs: 1385/6) 245	Unk-26 Cg_ATPSyn thase_F/R (SR IDs: 1385/6) 245	Unk-26 Cg_ATPSyn thase_F/R (SR IDs: 1385/6) 245	Unk-27 Cg_ATPSyn thase_F/R (SR IDs: 1385/6) 248	Unk-27 Cg_ATPSyn thase_F/R (SR IDs: 1385/6) 248	Unk-27 Cg_ATPSyn thase_F/R (SR IDs: 1385/6) 248	Unk-28 Cg_ATPSyn thase_F/R (SR IDs: 1385/6) 250	Unk-28 Cg_ATPSyn thase_F/R (SR IDs: 1385/6) 250	Unk-28 Cg_ATPSyn thase_F/R (SR IDs: 1385/6) 250
H	Unk-29 Cg_ATPSyn thase_F/R (SR IDs: 1385/6) 252	Unk-29 Cg_ATPSyn thase_F/R (SR IDs: 1385/6) 252	Unk-29 Cg_ATPSyn thase_F/R (SR IDs: 1385/6) 252	Unk-30 Cg_ATPSyn thase_F/R (SR IDs: 1385/6) 258	Unk-30 Cg_ATPSyn thase_F/R (SR IDs: 1385/6) 258	Unk-30 Cg_ATPSyn thase_F/R (SR IDs: 1385/6) 258	Unk-31 Cg_ATPSyn thase_F/R (SR IDs: 1385/6) 263	Unk-31 Cg_ATPSyn thase_F/R (SR IDs: 1385/6) 263	Unk-31 Cg_ATPSyn thase_F/R (SR IDs: 1385/6) 263	Unk-32 Cg_ATPSyn thase_F/R (SR IDs: 1385/6) 268	Unk-32 Cg_ATPSyn thase_F/R (SR IDs: 1385/6) 268	Unk-32 Cg_ATPSyn thase_F/R (SR IDs: 1385/6) 268

Quantification

Step #: 3  
Analysis Mode: Fluorophore  
Cq Determination: Single Threshold  
Baseline Method:  
SYBR: Auto Calculated  
Threshold Setting:  
SYBR: 3429.74, Auto Calculated



## Quantification Data

Well	Fluor	Target	Content	Sample	Cq	Cq Mean	Cq Std. Dev
A01	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-01	201	23.96	23.94	0.030
A02	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-01	201	23.96	23.94	0.030
A03	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-01	201	23.91	23.94	0.030
A04	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-02	202	23.27	23.30	0.036
A05	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-02	202	23.34	23.30	0.036
A06	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-02	202	23.29	23.30	0.036
A07	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-03	203	24.01	23.99	0.021
A08	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-03	203	23.97	23.99	0.021
A09	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-03	203	24.00	23.99	0.021
A10	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-04	204	23.15	23.24	0.137
A11	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-04	204	23.40	23.24	0.137
A12	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-04	204	23.17	23.24	0.137
B01	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-05	205	24.46	24.47	0.103
B02	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-05	205	24.57	24.47	0.103
B03	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-05	205	24.37	24.47	0.103
B04	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-06	207	23.50	23.41	0.127
B05	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-06	207	23.32	23.41	0.127
B06	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-06	207	N/A	0.00	0.000
B07	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-07	208	22.78	23.32	0.462
B08	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-07	208	23.57	23.32	0.462
B09	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-07	208	23.59	23.32	0.462
B10	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-08	209	27.82	27.84	0.027
B11	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-08	209	27.87	27.84	0.027
B12	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-08	209	27.82	27.84	0.027
C01	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-09	213	27.07	27.05	0.018
C02	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-09	213	27.04	27.05	0.018
C03	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-09	213	27.04	27.05	0.018

## Quantification Data

Well	Fluor	Target	Content	Sample	Cq	Cq Mean	Cq Std. Dev
C04	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-10	214	25.02	25.05	0.019
C05	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-10	214	25.06	25.05	0.019
C06	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-10	214	25.05	25.05	0.019
C07	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-11	216	25.01	24.99	0.026
C08	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-11	216	24.98	24.99	0.026
C09	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-11	216	24.96	24.99	0.026
C10	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-12	219	23.43	23.55	0.110
C11	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-12	219	23.58	23.55	0.110
C12	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-12	219	23.64	23.55	0.110
D01	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-13	227	27.08	27.02	0.050
D02	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-13	227	26.99	27.02	0.050
D03	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-13	227	27.00	27.02	0.050
D04	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-14	229	25.04	25.03	0.057
D05	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-14	229	24.96	25.03	0.057
D06	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-14	229	25.08	25.03	0.057
D07	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-15	230	24.83	24.77	0.065
D08	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-15	230	24.79	24.77	0.065
D09	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-15	230	24.70	24.77	0.065
D10	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-16	231	24.86	24.89	0.054
D11	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-16	231	24.95	24.89	0.054
D12	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-16	231	24.86	24.89	0.054
E01	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-17	232	23.60	23.43	0.160
E02	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-17	232	23.42	23.43	0.160
E03	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-17	232	23.28	23.43	0.160
E04	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-18	233	23.26	23.33	0.065
E05	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-18	233	23.39	23.33	0.065
E06	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-18	233	23.34	23.33	0.065
E07	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-19	235	24.47	24.53	0.067

## Quantification Data

Well	Fluor	Target	Content	Sample	Cq	Cq Mean	Cq Std. Dev
E08	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-19	235	24.51	24.53	0.067
E09	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-19	235	24.60	24.53	0.067
E10	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-20	236	23.79	23.85	0.058
E11	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-20	236	23.87	23.85	0.058
E12	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-20	236	23.90	23.85	0.058
F01	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-21	237	23.69	23.53	0.148
F02	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-21	237	23.40	23.53	0.148
F03	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-21	237	23.49	23.53	0.148
F04	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-22	238	24.51	24.52	0.020
F05	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-22	238	24.51	24.52	0.020
F06	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-22	238	24.55	24.52	0.020
F07	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-23	239	24.07	23.97	0.184
F08	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-23	239	24.08	23.97	0.184
F09	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-23	239	23.75	23.97	0.184
F10	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-24	240	25.05	25.08	0.033
F11	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-24	240	25.10	25.08	0.033
F12	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-24	240	25.11	25.08	0.033
G01	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-25	241	24.99	24.90	0.201
G02	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-25	241	25.03	24.90	0.201
G03	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-25	241	24.66	24.90	0.201
G04	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-26	245	23.12	23.18	0.078
G05	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-26	245	23.27	23.18	0.078
G06	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-26	245	23.16	23.18	0.078
G07	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-27	248	23.52	23.54	0.035
G08	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-27	248	23.52	23.54	0.035
G09	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-27	248	23.58	23.54	0.035
G10	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-28	250	23.10	23.11	0.034
G11	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-28	250	23.08	23.11	0.034

## Quantification Data

Well	Fluor	Target	Content	Sample	Cq	Cq Mean	Cq Std. Dev
G12	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-28	250	23.15	23.11	0.034
H01	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-29	252	25.23	25.16	0.058
H02	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-29	252	25.15	25.16	0.058
H03	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-29	252	25.11	25.16	0.058
H04	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-30	258	23.33	23.34	0.019
H05	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-30	258	23.33	23.34	0.019
H06	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-30	258	23.36	23.34	0.019
H07	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-31	263	24.13	24.06	0.072
H08	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-31	263	24.04	24.06	0.072
H09	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-31	263	23.99	24.06	0.072
H10	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-32	268	22.94	22.93	0.022
H11	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-32	268	22.96	22.93	0.022
H12	SYBR	Cg_ATPSynthase_F/R (SR IDs: 1385/6)	Unkn-32	268	22.91	22.93	0.022

## 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:B6.	False	
Standard without a Cq	N/A	True		False	

Data

Description	Value	Use	Results	Exclude Wells	All excluded wells
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	0.50	True		False	