sam_2024-03-25_08-53-47_Connect.pcrd

03/25/2024 10:39

Report Information

User: BioRad/sam
Data File Name: sam_2024-03-25_08-53-47_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: No

Run Setup

Run Information

Run Date: 03/25/2024 08:53
Run User: sam
Run Type: User-defined
Plate File: 20240325-cgig-carryover-cGAS-VIPERIN.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 cGAS 206	Unk-1 cGAS 206	Unk-2 cGAS 220	Unk-2 cGAS 220	Unk-3 cGAS 226	Unk-3 cGAS 226	Unk-4 cGAS 242	Unk-4 cGAS 242	Unk-5 cGAS 253	Unk-5 cGAS 253	Unk-6 cGAS 282	Unk-6 cGAS 282
B	Unk-7 cGAS 284	Unk-7 cGAS 284	Unk-8 cGAS 289	Unk-8 cGAS 289	Unk-9 cGAS 296	Unk-9 cGAS 296	Unk-10 cGAS 298	Unk-10 cGAS 298	Unk-11 cGAS 200	Unk-11 cGAS 200	Unk-12 cGAS 223	Unk-12 cGAS 223
C	Unk-13 cGAS 243	Unk-13 cGAS 243	Unk-14 cGAS 244	Unk-14 cGAS 244	Unk-15 cGAS 257	Unk-15 cGAS 257	Unk-16 cGAS 285	Unk-16 cGAS 285	NTC-1 cGAS	NTC-1 cGAS		
D	Unk-17 viperin 206	Unk-17 viperin 206	Unk-18 viperin 220	Unk-18 viperin 220	Unk-19 viperin 226	Unk-19 viperin 226	Unk-20 viperin 242	Unk-20 viperin 242	Unk-21 viperin 253	Unk-21 viperin 253	Unk-22 viperin 282	Unk-22 viperin 282
E	Unk-23 viperin 284	Unk-23 viperin 284	Unk-24 viperin 289	Unk-24 viperin 289	Unk-25 viperin 296	Unk-25 viperin 296	Unk-26 viperin 298	Unk-26 viperin 298	Unk-27 viperin 200	Unk-27 viperin 200	Unk-28 viperin 223	Unk-28 viperin 223

Plate Display

	1	2	3	4	5	6	7	8	9	10	11	12
F	Unk-29 viperin 243	Unk-29 viperin 243	Unk-30 viperin 244	Unk-30 viperin 244	Unk-31 viperin 257	Unk-31 viperin 257	Unk-32 viperin 285	Unk-32 viperin 285	NTC-2 viperin	NTC-2 viperin		
G												
H												

Quantification

Step #: 3
Analysis Mode: Target
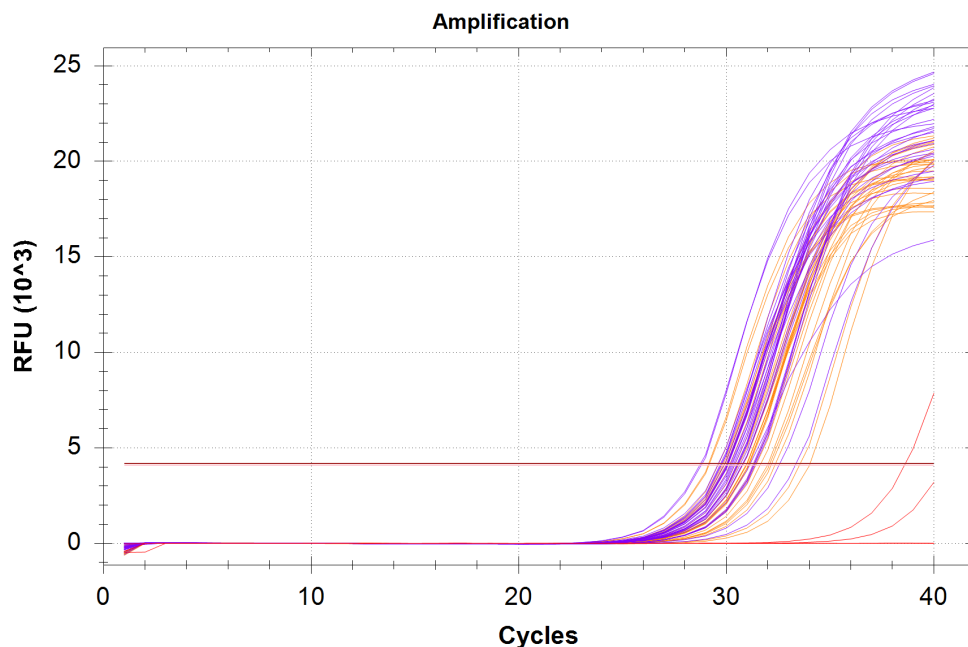**Cq Determination:** Single Threshold
Baseline Method:
viperin: Auto Calculated
cGAS: Auto Calculated
Threshold Setting:
viperin: 4179.32, Auto Calculated
cGAS: 4086.42, Auto Calculated

Quantification Data

Well	Fluor	Target	Content	Sample	Cq	Cq Mean	Cq Std. Dev
A01	SYBR	cGAS	Unkn-01	206	31.05	31.18	0.181
A02	SYBR	cGAS	Unkn-01	206	31.31	31.18	0.181
A03	SYBR	cGAS	Unkn-02	220	30.03	30.09	0.088
A04	SYBR	cGAS	Unkn-02	220	30.16	30.09	0.088
A05	SYBR	cGAS	Unkn-03	226	29.59	29.74	0.205
A06	SYBR	cGAS	Unkn-03	226	29.88	29.74	0.205
A07	SYBR	cGAS	Unkn-04	242	30.78	30.87	0.139
A08	SYBR	cGAS	Unkn-04	242	30.97	30.87	0.139
A09	SYBR	cGAS	Unkn-05	253	29.12	29.14	0.026
A10	SYBR	cGAS	Unkn-05	253	29.16	29.14	0.026

Quantification Data

Well	Fluor	Target	Content	Sample	Cq	Cq Mean	Cq Std. Dev
A11	SYBR	cGAS	Unkn-06	282	30.78	30.91	0.196
A12	SYBR	cGAS	Unkn-06	282	31.05	30.91	0.196
B01	SYBR	cGAS	Unkn-07	284	30.04	30.02	0.027
B02	SYBR	cGAS	Unkn-07	284	30.00	30.02	0.027
B03	SYBR	cGAS	Unkn-08	289	32.15	32.11	0.062
B04	SYBR	cGAS	Unkn-08	289	32.07	32.11	0.062
B05	SYBR	cGAS	Unkn-09	296	29.90	29.86	0.069
B06	SYBR	cGAS	Unkn-09	296	29.81	29.86	0.069
B07	SYBR	cGAS	Unkn-10	298	30.95	30.94	0.006
B08	SYBR	cGAS	Unkn-10	298	30.94	30.94	0.006
B09	SYBR	cGAS	Unkn-11	200	30.54	30.56	0.032
B10	SYBR	cGAS	Unkn-11	200	30.58	30.56	0.032
B11	SYBR	cGAS	Unkn-12	223	31.62	31.52	0.145
B12	SYBR	cGAS	Unkn-12	223	31.42	31.52	0.145
C01	SYBR	cGAS	Unkn-13	243	33.52	33.76	0.342
C02	SYBR	cGAS	Unkn-13	243	34.01	33.76	0.342
C03	SYBR	cGAS	Unkn-14	244	30.40	30.58	0.261
C04	SYBR	cGAS	Unkn-14	244	30.77	30.58	0.261
C05	SYBR	cGAS	Unkn-15	257	31.09	31.07	0.030
C06	SYBR	cGAS	Unkn-15	257	31.05	31.07	0.030
C07	SYBR	cGAS	Unkn-16	285	32.34	32.16	0.250
C08	SYBR	cGAS	Unkn-16	285	31.98	32.16	0.250
C09	SYBR	cGAS	NTC-01		N/A	0.00	0.000
C10	SYBR	cGAS	NTC-01		38.58	38.58	0.000
D01	SYBR	viperin	Unkn-17	206	30.25	30.23	0.035
D02	SYBR	viperin	Unkn-17	206	30.20	30.23	0.035
D03	SYBR	viperin	Unkn-18	220	30.07	30.09	0.026
D04	SYBR	viperin	Unkn-18	220	30.10	30.09	0.026
D05	SYBR	viperin	Unkn-19	226	28.84	28.80	0.053
D06	SYBR	viperin	Unkn-19	226	28.76	28.80	0.053
D07	SYBR	viperin	Unkn-20	242	29.62	29.67	0.077
D08	SYBR	viperin	Unkn-20	242	29.73	29.67	0.077
D09	SYBR	viperin	Unkn-21	253	30.06	30.08	0.024
D10	SYBR	viperin	Unkn-21	253	30.10	30.08	0.024
D11	SYBR	viperin	Unkn-22	282	30.36	30.53	0.232
D12	SYBR	viperin	Unkn-22	282	30.69	30.53	0.232
E01	SYBR	viperin	Unkn-23	284	31.31	31.33	0.037
E02	SYBR	viperin	Unkn-23	284	31.36	31.33	0.037
E03	SYBR	viperin	Unkn-24	289	29.77	29.93	0.213
E04	SYBR	viperin	Unkn-24	289	30.08	29.93	0.213
E05	SYBR	viperin	Unkn-25	296	30.54	30.53	0.011
E06	SYBR	viperin	Unkn-25	296	30.53	30.53	0.011
E07	SYBR	viperin	Unkn-26	298	30.58	30.58	0.001
E08	SYBR	viperin	Unkn-26	298	30.58	30.58	0.001
E09	SYBR	viperin	Unkn-27	200	31.42	31.40	0.035
E10	SYBR	viperin	Unkn-27	200	31.37	31.40	0.035
E11	SYBR	viperin	Unkn-28	223	30.30	30.73	0.606
E12	SYBR	viperin	Unkn-28	223	31.16	30.73	0.606
F01	SYBR	viperin	Unkn-29	243	32.58	32.97	0.553

Quantification Data

Well	Fluor	Target	Content	Sample	Cq	Cq Mean	Cq Std. Dev
F02	SYBR	viperin	Unkn-29	243	33.36	32.97	0.553
F03	SYBR	viperin	Unkn-30	244	30.03	30.23	0.282
F04	SYBR	viperin	Unkn-30	244	30.43	30.23	0.282
F05	SYBR	viperin	Unkn-31	257	29.80	29.86	0.084
F06	SYBR	viperin	Unkn-31	257	29.92	29.86	0.084
F07	SYBR	viperin	Unkn-32	285	30.79	30.80	0.016
F08	SYBR	viperin	Unkn-32	285	30.81	30.80	0.016
F09	SYBR	viperin	NTC-02		N/A	0.00	0.000
F10	SYBR	viperin	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
cGAS	cGAS	False	Yes	100.0%
viperin	viperin	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	Mean Cq	Cq SEM	P-Value
cGAS	200		N/A	N/A	N/A	30.56	0.02288	N/A
cGAS	206		N/A	N/A	N/A	31.18	0.12804	N/A
cGAS	220		N/A	N/A	N/A	30.09	0.06211	N/A
cGAS	223		N/A	N/A	N/A	31.52	0.10234	N/A

Gene Expression - Bar Chart Data

Target	Sample	Control	Expression	Expression SEM	Corrected Expression SEM	Mean Cq	Cq SEM	P-Value
cGAS	226		N/A	N/A	N/A	29.74	0.14468	N/A
cGAS	242		N/A	N/A	N/A	30.87	0.09863	N/A
cGAS	243		N/A	N/A	N/A	33.76	0.24197	N/A
cGAS	244		N/A	N/A	N/A	30.58	0.18429	N/A
cGAS	253		N/A	N/A	N/A	29.14	0.01863	N/A
cGAS	257		N/A	N/A	N/A	31.07	0.02138	N/A
cGAS	282		N/A	N/A	N/A	30.91	0.13834	N/A
cGAS	284		N/A	N/A	N/A	30.02	0.01912	N/A
cGAS	285		N/A	N/A	N/A	32.16	0.17673	N/A
cGAS	289		N/A	N/A	N/A	32.11	0.04376	N/A
cGAS	296		N/A	N/A	N/A	29.86	0.04846	N/A
cGAS	298		N/A	N/A	N/A	30.94	0.00421	N/A
viperin	200		N/A	N/A	N/A	31.40	0.02475	N/A
viperin	206		N/A	N/A	N/A	30.23	0.02465	N/A
viperin	220		N/A	N/A	N/A	30.09	0.01862	N/A
viperin	223		N/A	N/A	N/A	30.73	0.42841	N/A
viperin	226		N/A	N/A	N/A	28.80	0.03737	N/A
viperin	242		N/A	N/A	N/A	29.67	0.05425	N/A
viperin	243		N/A	N/A	N/A	32.97	0.39086	N/A
viperin	244		N/A	N/A	N/A	30.23	0.19966	N/A
viperin	253		N/A	N/A	N/A	30.08	0.01675	N/A
viperin	257		N/A	N/A	N/A	29.86	0.05964	N/A
viperin	282		N/A	N/A	N/A	30.53	0.16425	N/A
viperin	284		N/A	N/A	N/A	31.33	0.02646	N/A
viperin	285		N/A	N/A	N/A	30.80	0.01158	N/A
viperin	289		N/A	N/A	N/A	29.93	0.15094	N/A
viperin	296		N/A	N/A	N/A	30.53	0.00748	N/A
viperin	298		N/A	N/A	N/A	30.58	0.00066	N/A

Melt Curve

Step #: 5

Melt Curve

Melt Peak
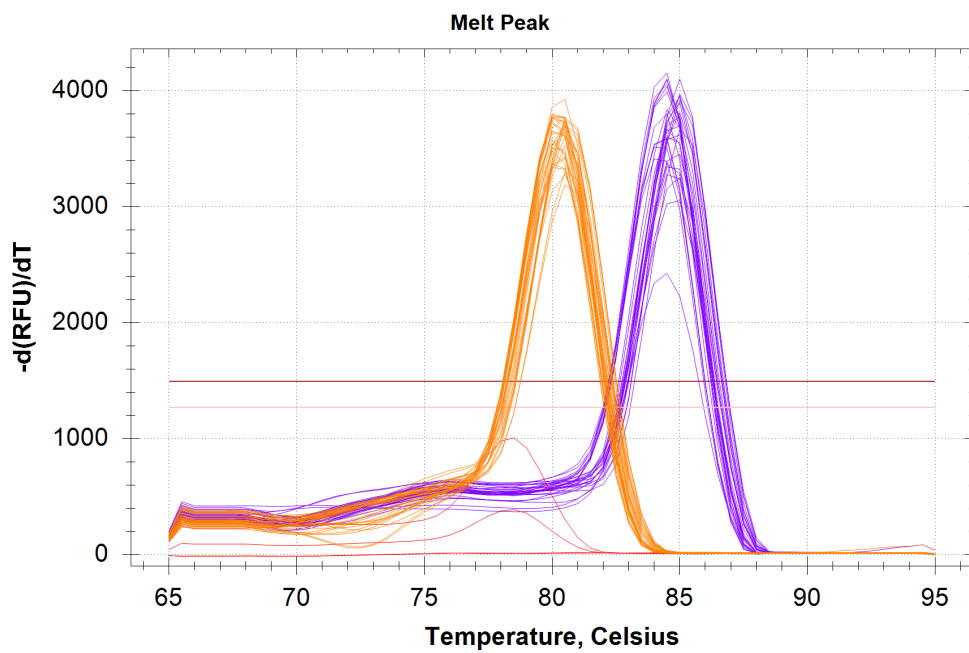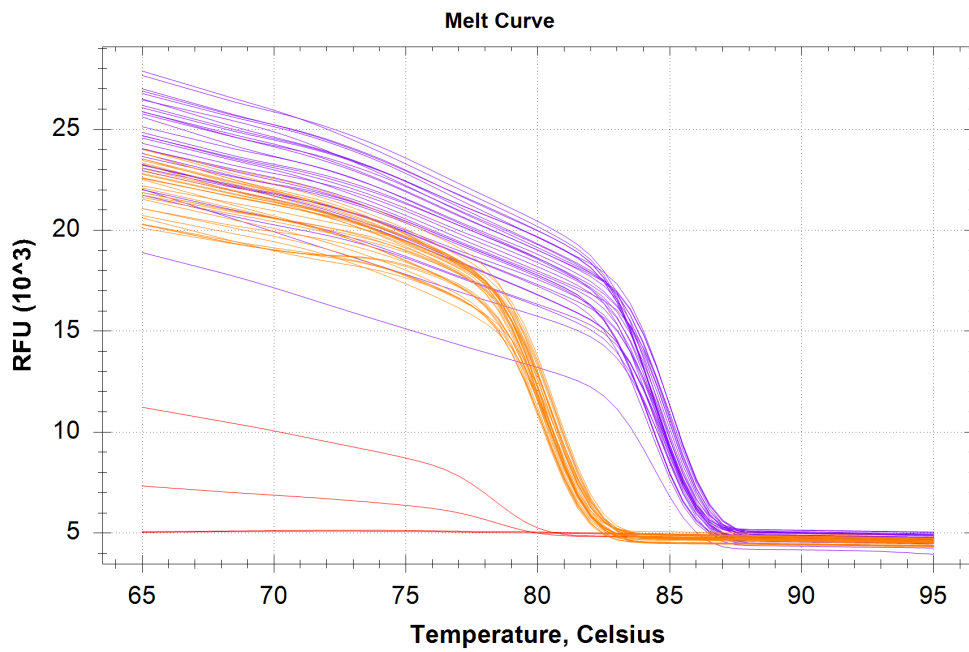
Melt Curve Data

Well	Fluor	Target	Content	Sample	Melt Temp
A01	SYBR	cGAS	Unkn-01	206	80.50
A02	SYBR	cGAS	Unkn-01	206	80.50
A03	SYBR	cGAS	Unkn-02	220	80.50
A04	SYBR	cGAS	Unkn-02	220	80.50
A05	SYBR	cGAS	Unkn-03	226	80.00
A06	SYBR	cGAS	Unkn-03	226	80.00
A07	SYBR	cGAS	Unkn-04	242	80.50
A08	SYBR	cGAS	Unkn-04	242	80.50
A09	SYBR	cGAS	Unkn-05	253	80.00

Melt Curve Data

Well	Fluor	Target	Content	Sample	Melt Temp
A10	SYBR	cGAS	Unkn-05	253	80.00
A11	SYBR	cGAS	Unkn-06	282	80.00
A12	SYBR	cGAS	Unkn-06	282	80.00
B01	SYBR	cGAS	Unkn-07	284	80.00
B02	SYBR	cGAS	Unkn-07	284	80.00
B03	SYBR	cGAS	Unkn-08	289	80.50
B04	SYBR	cGAS	Unkn-08	289	80.50
B05	SYBR	cGAS	Unkn-09	296	80.50
B06	SYBR	cGAS	Unkn-09	296	80.50
B07	SYBR	cGAS	Unkn-10	298	80.00
B08	SYBR	cGAS	Unkn-10	298	80.00
B09	SYBR	cGAS	Unkn-11	200	80.00
B10	SYBR	cGAS	Unkn-11	200	80.00
B11	SYBR	cGAS	Unkn-12	223	80.00
B12	SYBR	cGAS	Unkn-12	223	80.00
C01	SYBR	cGAS	Unkn-13	243	80.50
C02	SYBR	cGAS	Unkn-13	243	80.00
C03	SYBR	cGAS	Unkn-14	244	80.50
C04	SYBR	cGAS	Unkn-14	244	80.50
C05	SYBR	cGAS	Unkn-15	257	80.50
C06	SYBR	cGAS	Unkn-15	257	80.50
C07	SYBR	cGAS	Unkn-16	285	80.50
C08	SYBR	cGAS	Unkn-16	285	80.50
C09	SYBR	cGAS	NTC-01		None
C10	SYBR	cGAS	NTC-01		None
D01	SYBR	viperin	Unkn-17	206	85.00
D02	SYBR	viperin	Unkn-17	206	85.00
D03	SYBR	viperin	Unkn-18	220	84.50
D04	SYBR	viperin	Unkn-18	220	84.50
D05	SYBR	viperin	Unkn-19	226	85.00
D06	SYBR	viperin	Unkn-19	226	85.00
D07	SYBR	viperin	Unkn-20	242	85.00
D08	SYBR	viperin	Unkn-20	242	85.00
D09	SYBR	viperin	Unkn-21	253	85.00
D10	SYBR	viperin	Unkn-21	253	85.00
D11	SYBR	viperin	Unkn-22	282	85.00
D12	SYBR	viperin	Unkn-22	282	85.00
E01	SYBR	viperin	Unkn-23	284	85.00
E02	SYBR	viperin	Unkn-23	284	85.00
E03	SYBR	viperin	Unkn-24	289	84.50
E04	SYBR	viperin	Unkn-24	289	84.50
E05	SYBR	viperin	Unkn-25	296	84.50
E06	SYBR	viperin	Unkn-25	296	84.50
E07	SYBR	viperin	Unkn-26	298	84.50
E08	SYBR	viperin	Unkn-26	298	84.50
E09	SYBR	viperin	Unkn-27	200	85.00
E10	SYBR	viperin	Unkn-27	200	85.00
E11	SYBR	viperin	Unkn-28	223	84.50
E12	SYBR	viperin	Unkn-28	223	84.50
F01	SYBR	viperin	Unkn-29	243	84.50

Melt Curve Data

Well	Fluor	Target	Content	Sample	Melt Temp
F02	SYBR	viperin	Unkn-29	243	84.50
F03	SYBR	viperin	Unkn-30	244	84.50
F04	SYBR	viperin	Unkn-30	244	84.50
F05	SYBR	viperin	Unkn-31	257	84.50
F06	SYBR	viperin	Unkn-31	257	84.50
F07	SYBR	viperin	Unkn-32	285	84.00
F08	SYBR	viperin	Unkn-32	285	84.00
F09	SYBR	viperin	NTC-02		None
F10	SYBR	viperin	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	cGAS:A5, A6, C1, C2, C3, C4, C7, C8. viperin:D11, D12, E3, E4, E11, E12, F1, F2, F3, F4.	False	