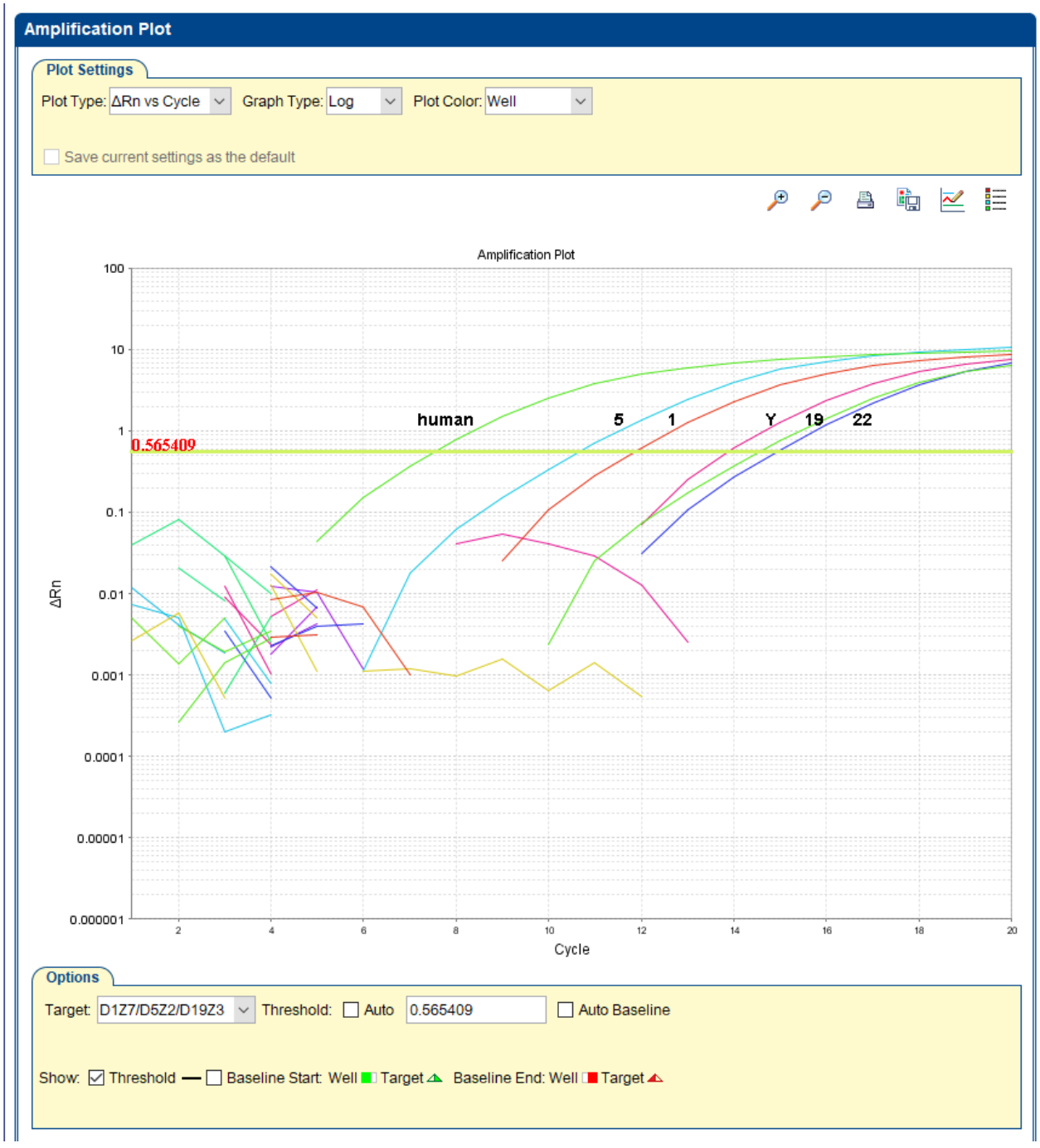
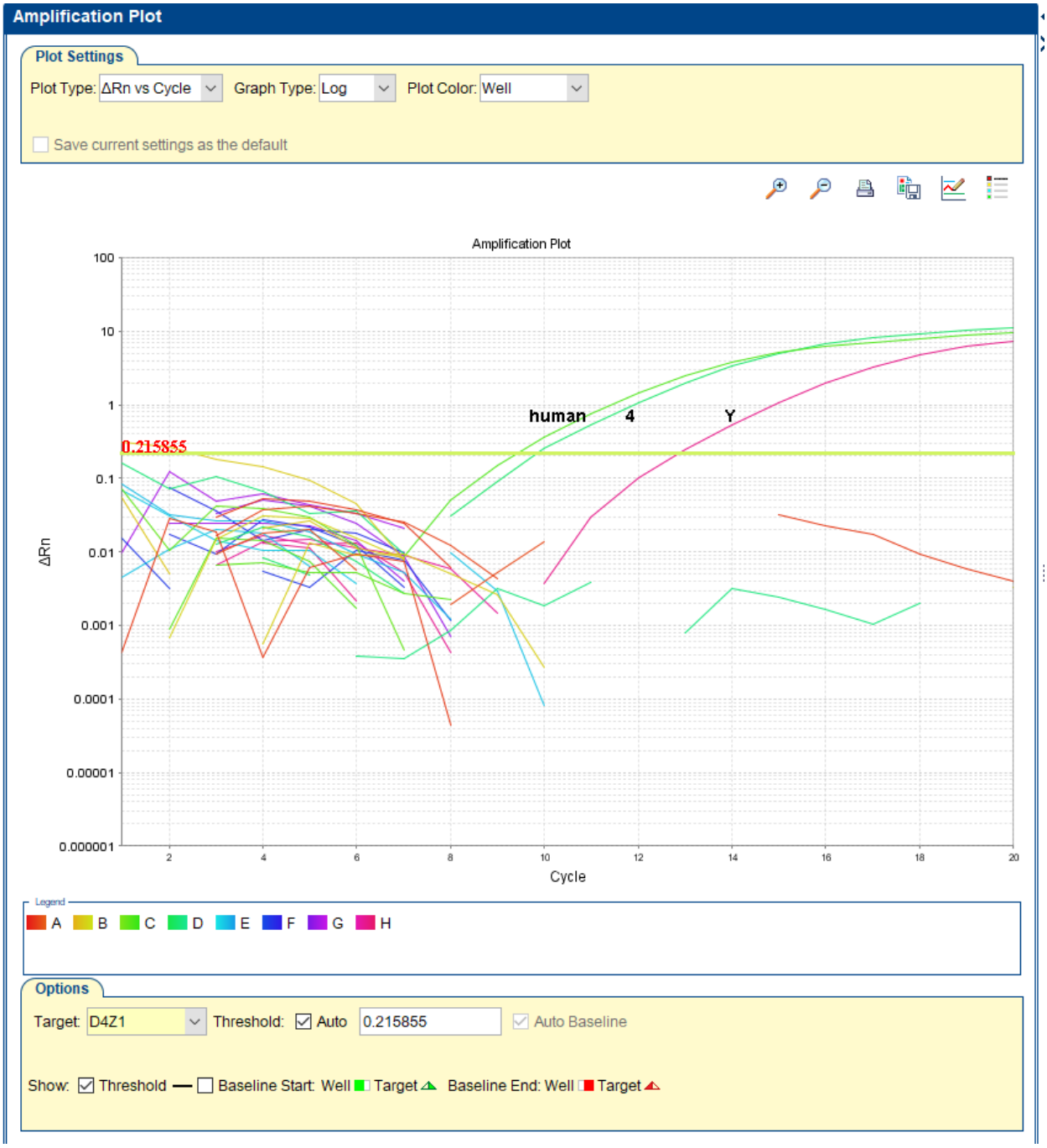
Figure S2.

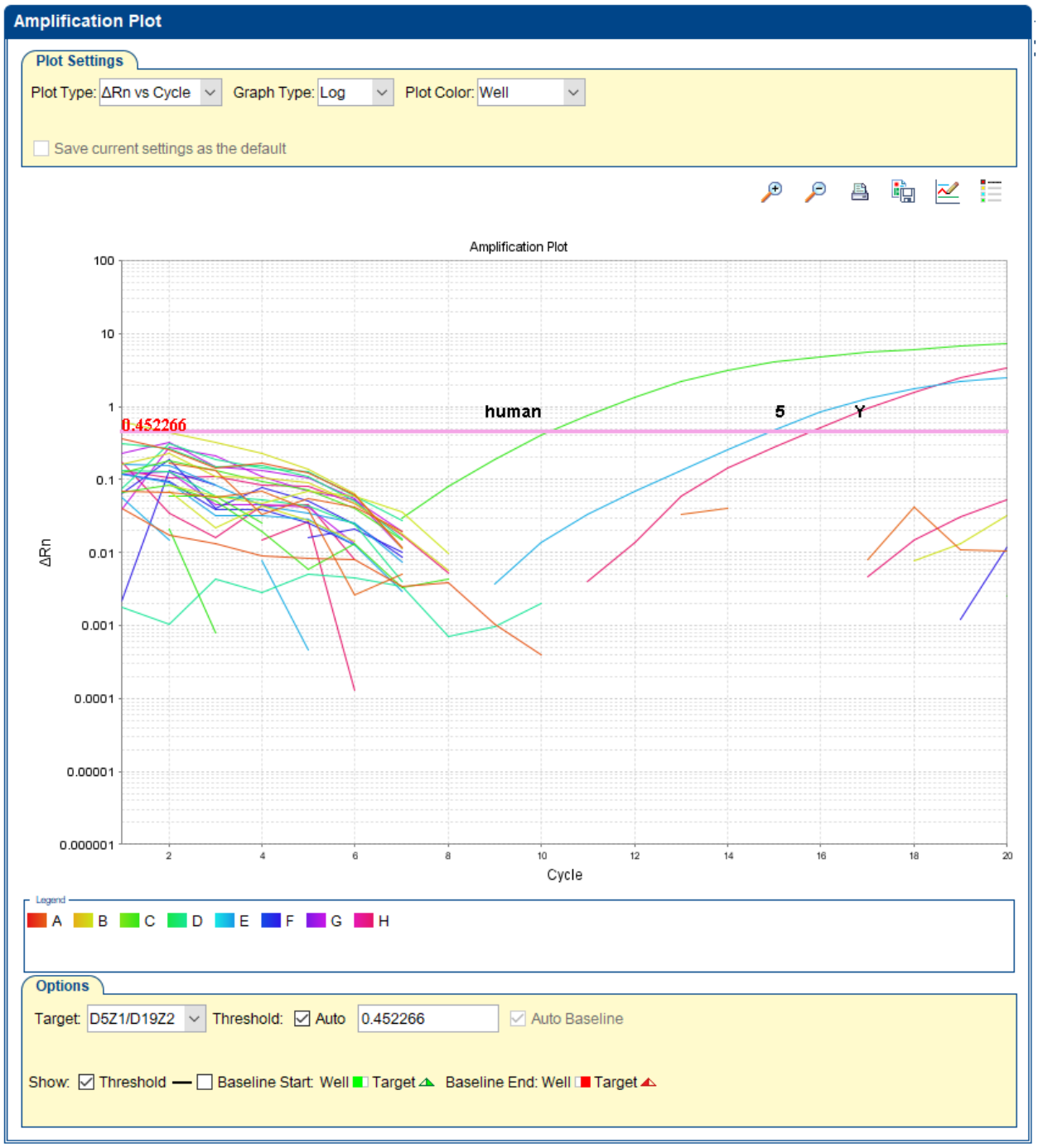
D1Z7/D5Z2/D19Z3



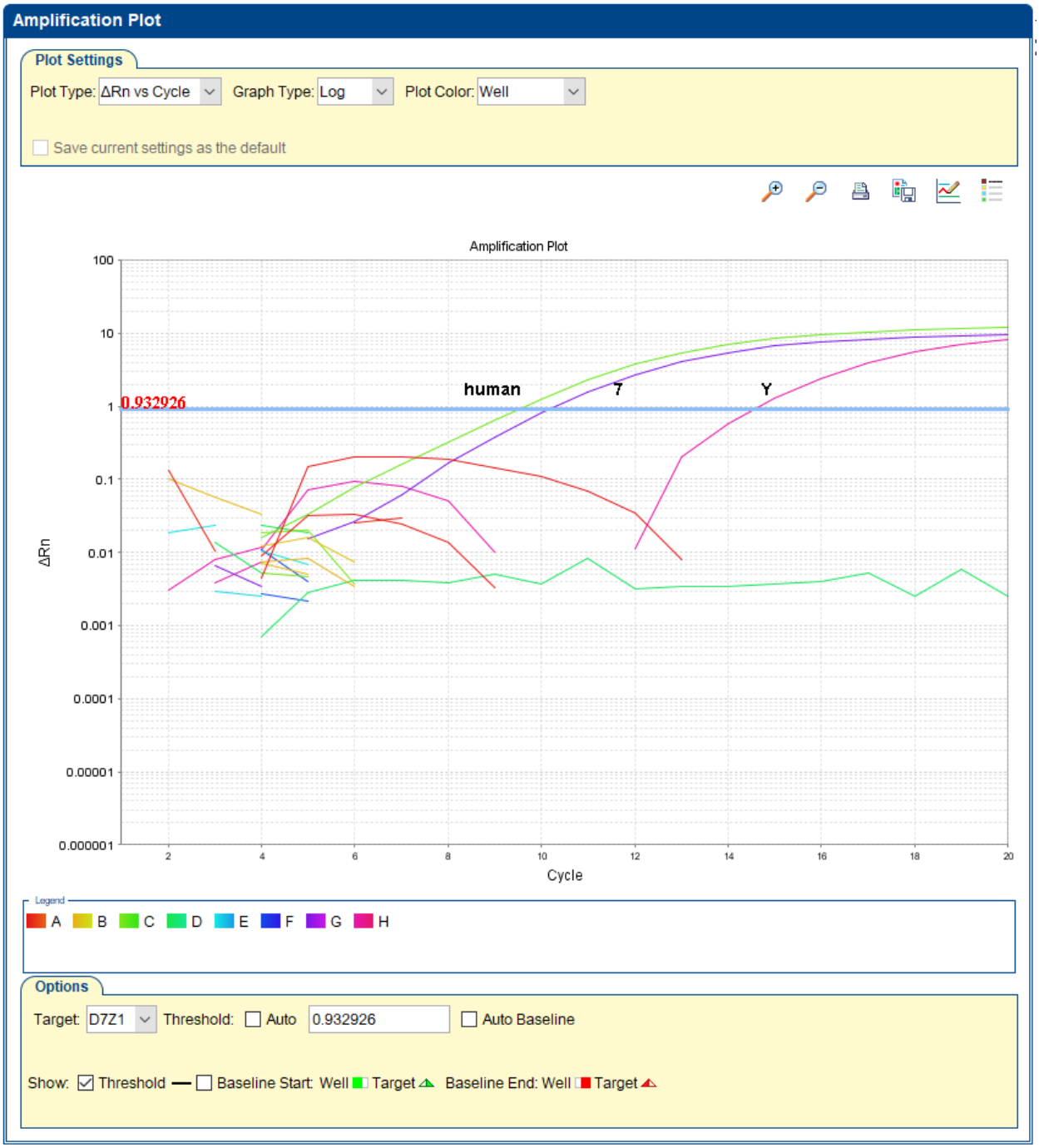
D4Z1


Amplification Plot
Plot Settings
Plot Type: ΔRn vs Cycle
Graph Type: Log
Plot Color: Well
Save current settings as the default
Amplification Plot
human 4 Y
0.215855
ΔRn
Cycle
Legend
A B C D E F G H
Options
Target: D4Z1
Threshold: Auto 0.215855
Auto Baseline
Show: Threshold Baseline Start: Well Target Baseline End: Well Target

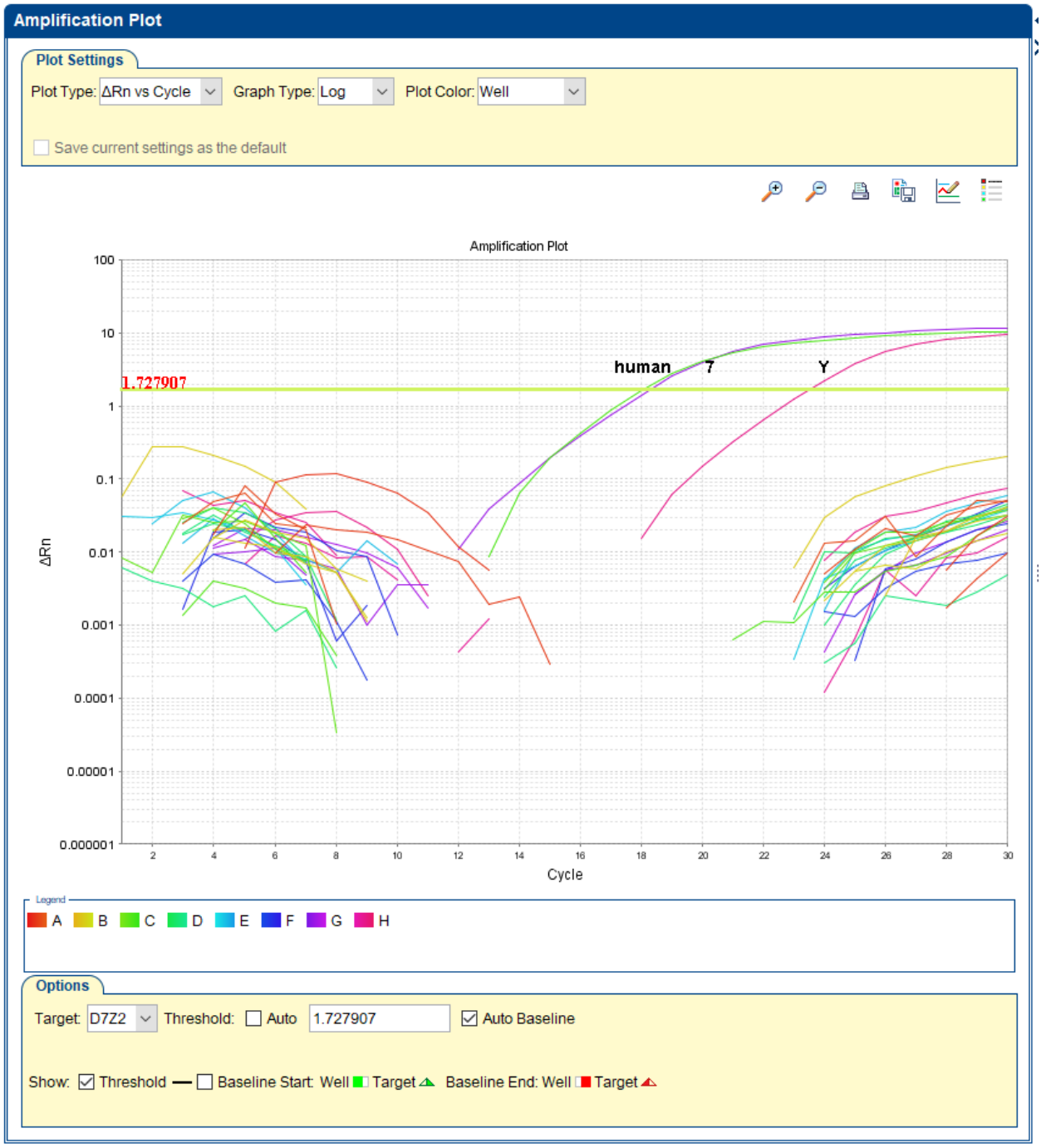
D5Z1


Amplification Plot
Plot Settings
Plot Type: ΔRn vs Cycle
Graph Type: Log
Plot Color: Well
Save current settings as the default
Amplification Plot
human
5
Y
0.452266
ΔRn
Cycle
Legend
A B C D E F G H
Options
Target: D5Z1/D19Z2
Threshold: Auto 0.452266
Auto Baseline
Show: Threshold Baseline Start: Well Target Baseline End: Well Target

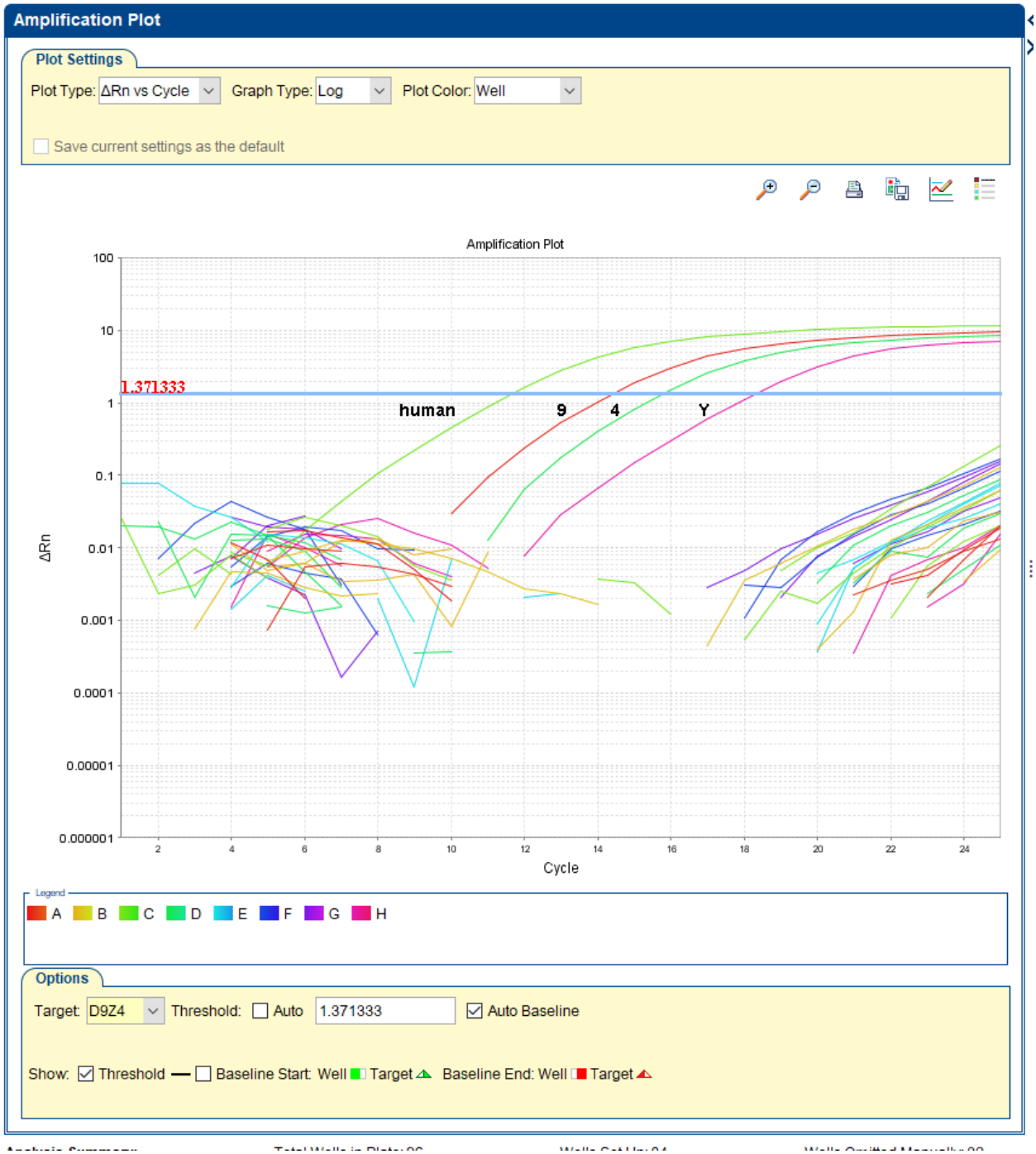
D7Z1


Amplification Plot
Plot Settings
Plot Type: ΔRn vs Cycle
Graph Type: Log
Plot Color: Well
Save current settings as the default
Amplification Plot
100
10
1
0.1
0.01
0.001
0.0001
0.00001
0.000001
0.932926
human
7
Y
ΔRn
2
4
6
8
10
12
14
16
18
20
Cycle
Legend
A B C D E F G H
Options
Target: D7Z1
Threshold: Auto 0.932926
Auto Baseline
Show: Threshold Baseline Start: Well Target Baseline End: Well Target

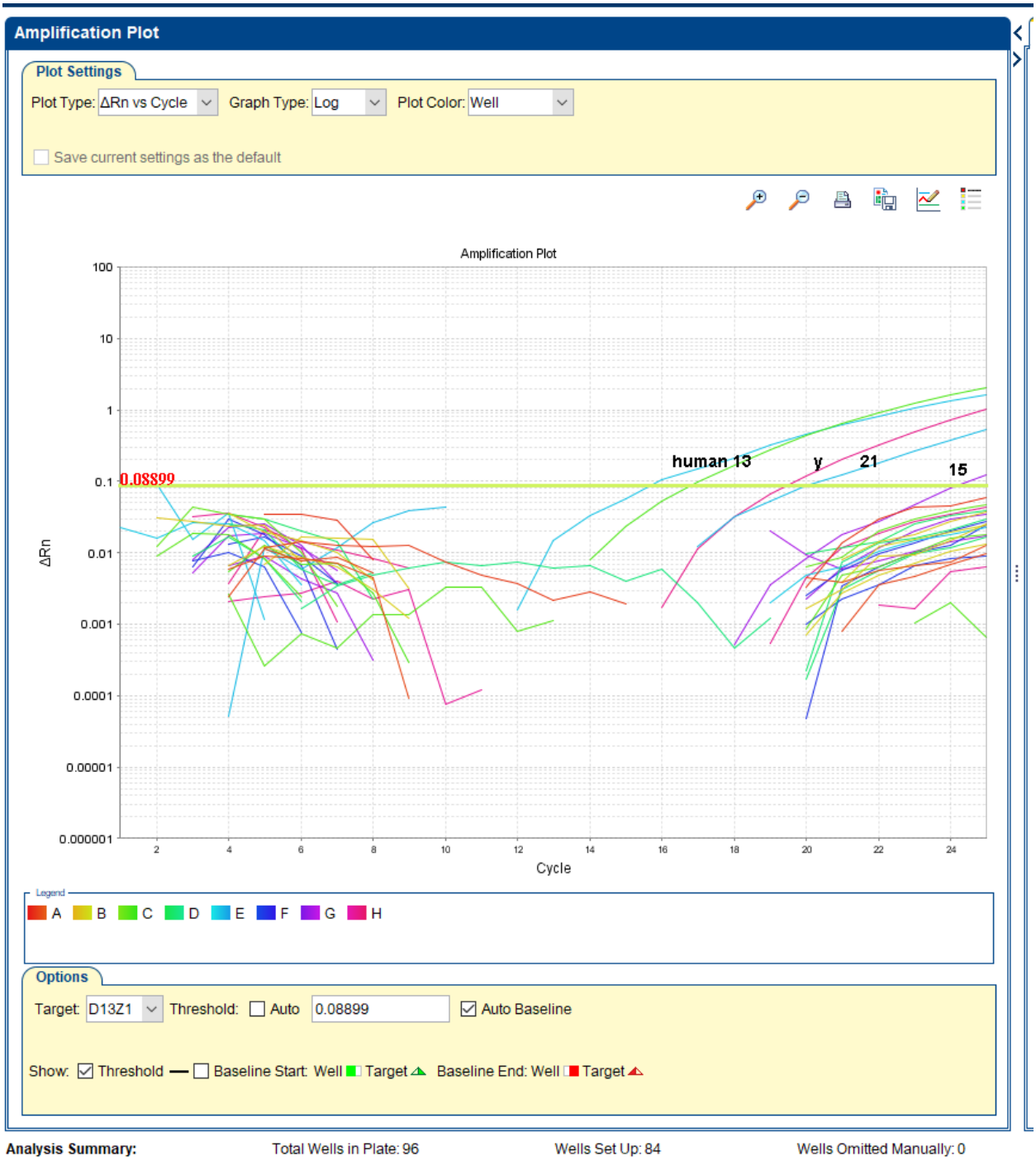
D7Z2


Amplification Plot
Plot Settings
Plot Type: ΔRn vs Cycle
Graph Type: Log
Plot Color: Well
Save current settings as the default
Amplification Plot
1.727907
human 7 Y
ΔRn
Cycle
Legend
A B C D E F G H
Options
Target: D7Z2
Threshold: Auto 1.727907
Auto Baseline
Show: Threshold Baseline Start: Well Target Baseline End: Well Target

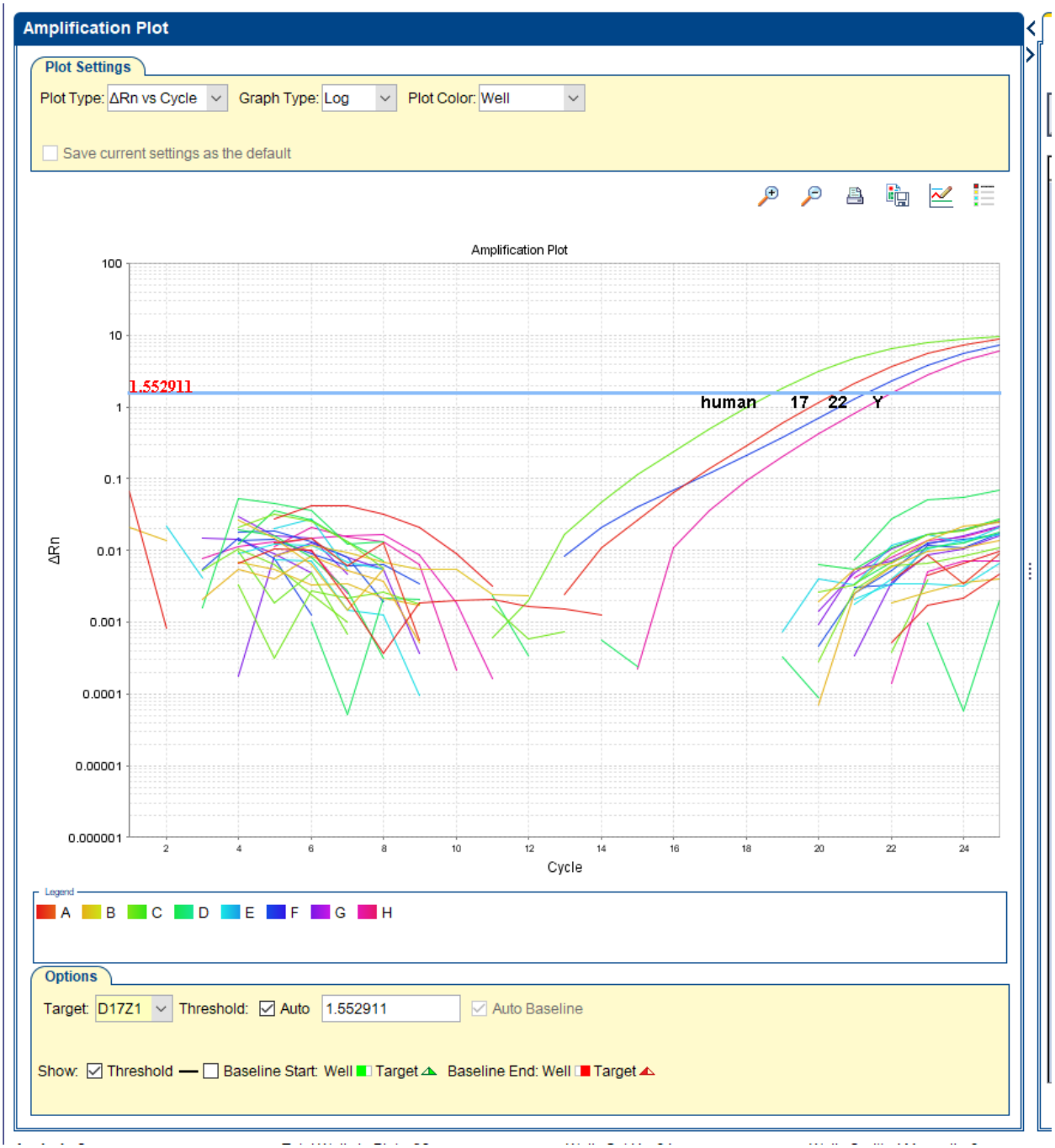
D9Z4


Amplification Plot
Plot Settings
Plot Type: ΔRn vs Cycle
Graph Type: Log
Plot Color: Well
Save current settings as the default
Amplification Plot
1.371333
human
9
4
Y
ΔRn
Cycle
Legend
A B C D E F G H
Options
Target: D9Z4
Threshold:
Auto
1.371333
Auto Baseline
Show: Threshold
Baseline Start: Well
Target
Baseline End: Well
Target

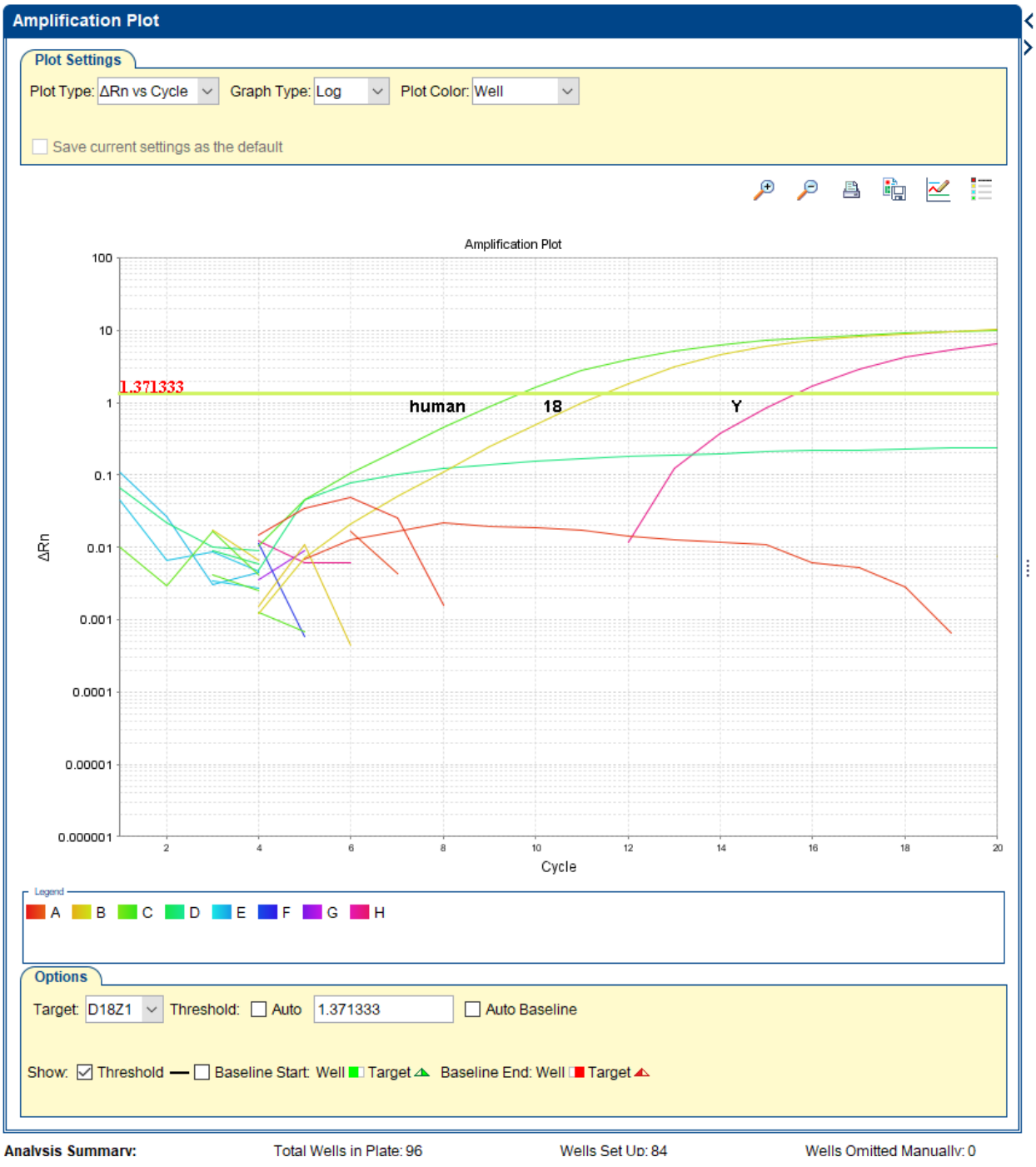
D13Z1/D21Z1


Amplification Plot
Plot Settings
Plot Type: ΔRn vs Cycle
Graph Type: Log
Plot Color: Well
Save current settings as the default
Amplification Plot
100
10
1
0.1
0.01
0.001
0.0001
0.00001
0.000001
ΔRn
0.08899
human 13
y
21
15
2
4
6
8
10
12
14
16
18
20
22
24
Cycle
Legend
A B C D E F G H
Options
Target: D13Z1
Threshold: Auto 0.08899
Auto Baseline
Show: Threshold Baseline Start: Well Target Baseline End: Well Target
Analysis Summary:
Total Wells in Plate: 96
Wells Set Up: 84
Wells Omitted Manually: 0

D17Z1

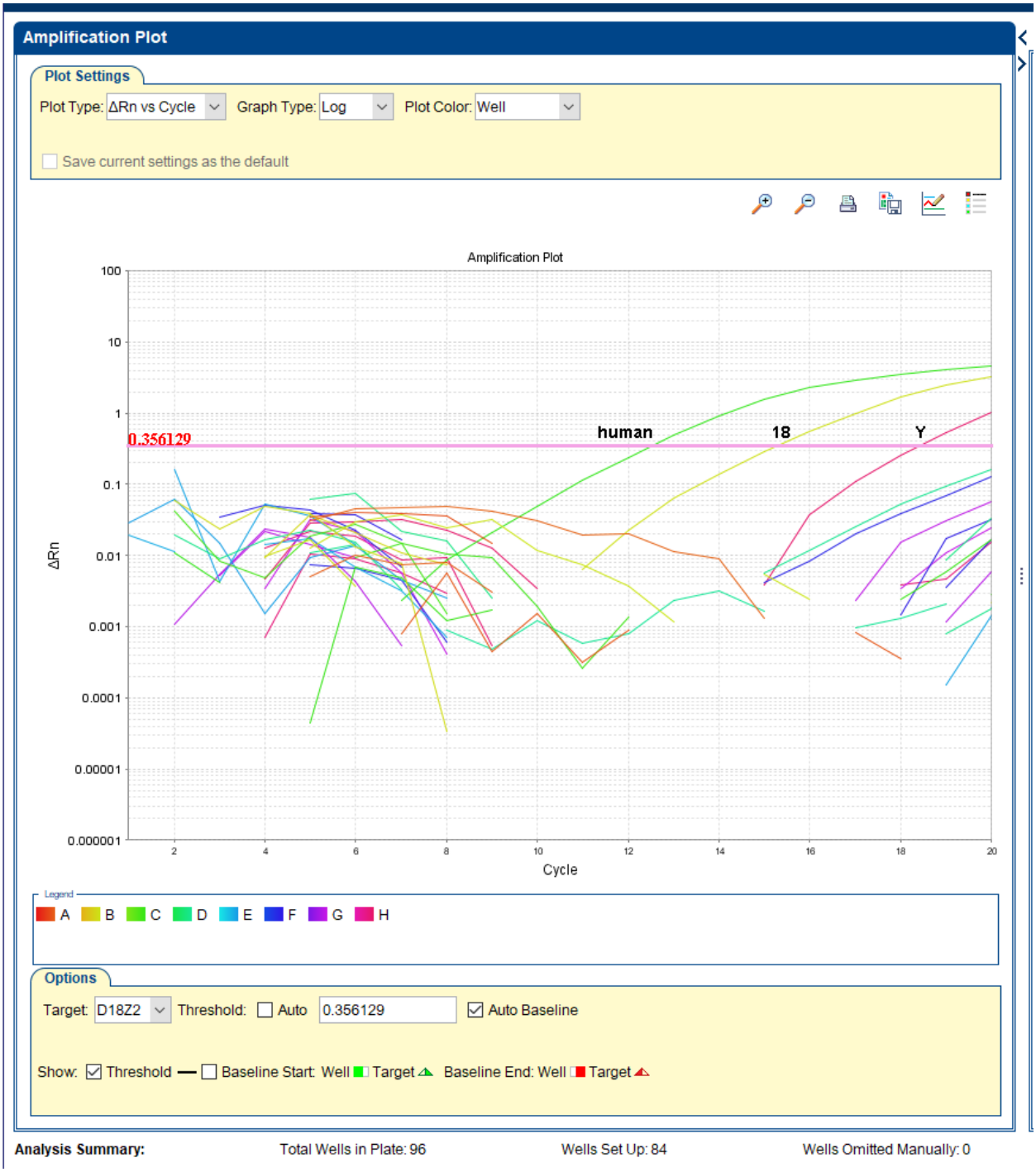

Amplification Plot
Plot Settings
Plot Type: ΔRn vs Cycle
Graph Type: Log
Plot Color: Well
Save current settings as the default
Amplification Plot
1.552911
human 17 22 Y
ΔRn
Cycle
Legend
A B C D E F G H
Options
Target: D17Z1
Threshold: Auto 1.552911
Auto Baseline
Show: Threshold Baseline Start: Well Target Baseline End: Well Target

D18Z1

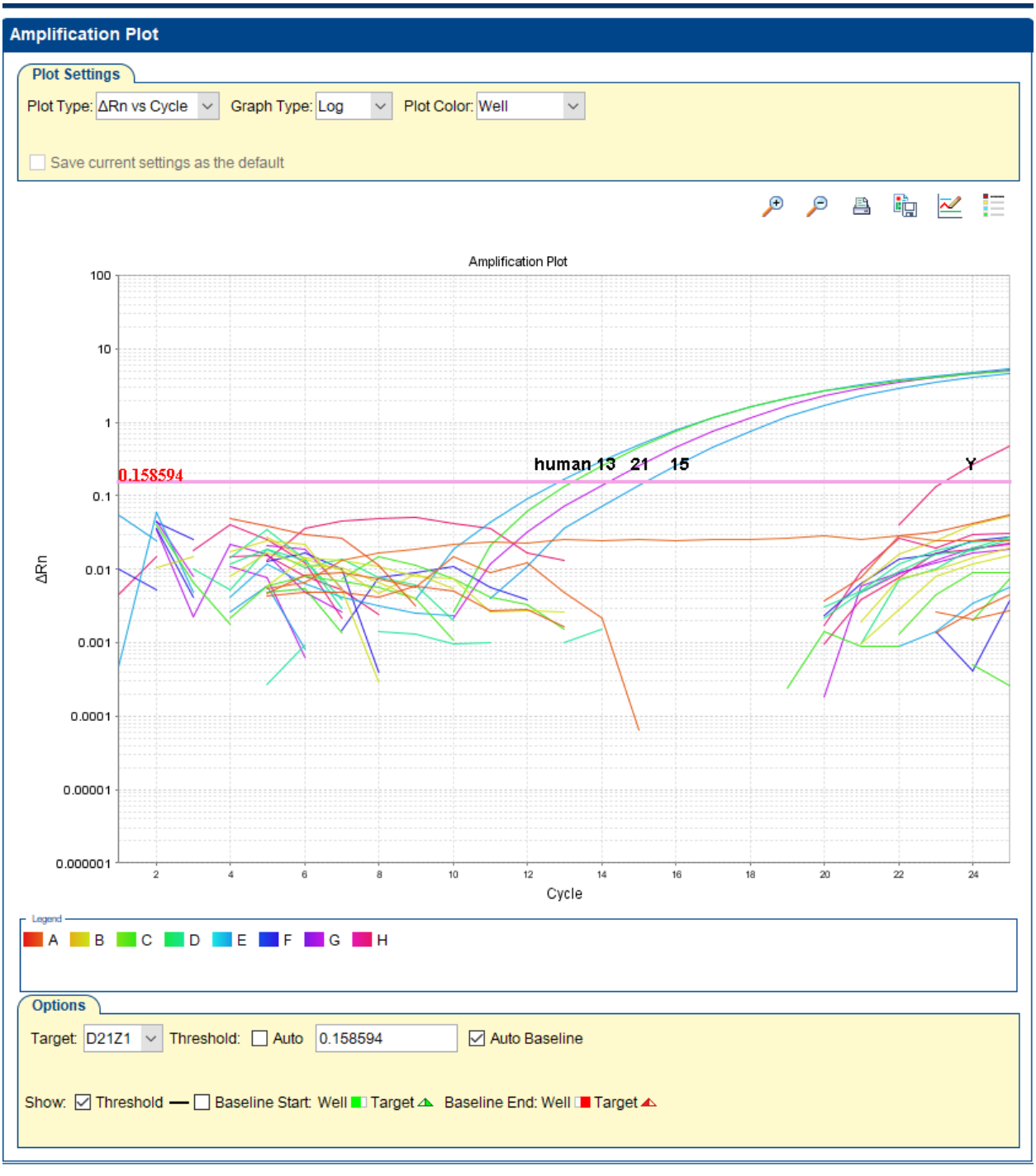


Analysis Summary: Total Wells in Plate: 96 Wells Set Up: 84 Wells Omitted Manually: 0

D18Z2


Amplification Plot
Plot Settings
Plot Type: ΔRn vs Cycle
Graph Type: Log
Plot Color: Well
Save current settings as the default
Amplification Plot
0.356129
human
18
Y
ΔRn
Cycle
Legend
A B C D E F G H
Options
Target: D18Z2
Threshold:
Auto
0.356129
Auto Baseline
Show: Threshold
Baseline Start: Well
Target
Baseline End: Well
Target
Analysis Summary:
Total Wells in Plate: 96
Wells Set Up: 84
Wells Omitted Manually: 0

D21Z1/D13Z1


Amplification Plot
Plot Settings
Plot Type: ΔRn vs Cycle
Graph Type: Log
Plot Color: Well
Save current settings as the default
Amplification Plot
0.158594
human 13 21 15
Y
ΔRn
Cycle
Legend
A B C D E F G H
Options
Target: D21Z1
Threshold:
Auto
0.158594
Auto Baseline
Show: Threshold
Baseline Start: Well Target
Baseline End: Well Target

DYZ3

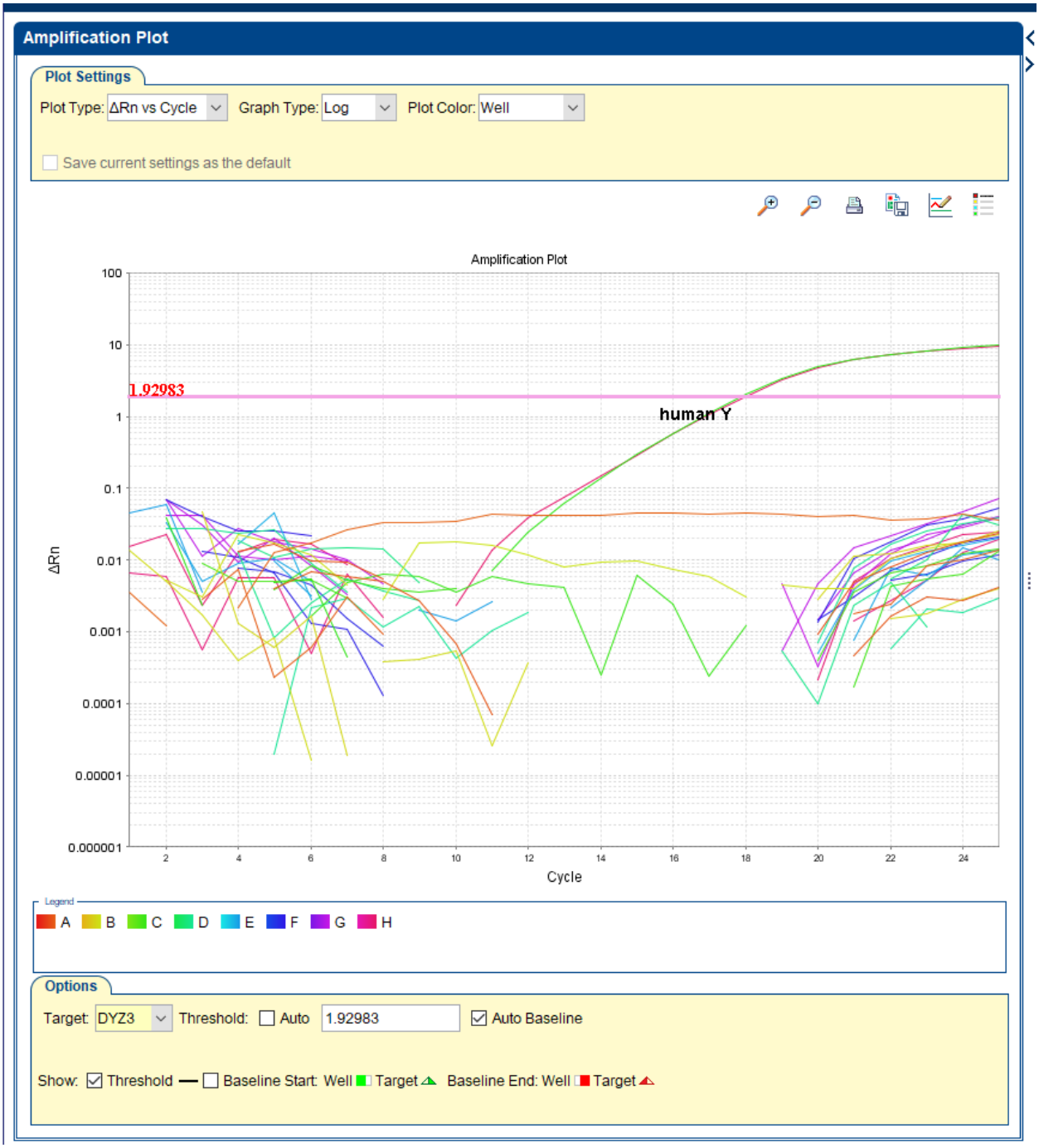

Amplification Plot
Plot Settings
Plot Type: ΔRn vs Cycle
Graph Type: Log
Plot Color: Well
Save current settings as the default
Amplification Plot
1.92983
human Y
ΔRn
Cycle
Legend
A B C D E F G H
Options
Target: DYZ3
Threshold: Auto 1.92983
Auto Baseline
Show: Threshold Baseline Start: Well Target Baseline End: Well Target

Figure S2. **Detection of centromere arrays in Chr Y**. qPCR assays of centromere arrays were tested in a PCR reaction with DNA isolated from human/rodent hybrid cells that contain single human chromosomes at the conditions reported in Table S2. DNA from mouse or parental hamster cells is included to control for cross-species hybridization of repeats along with human DNA isolated from peripheral blood lymphocytes that served as a positive control. Water was used as a negative control. The specificity of arrays was verified by sequencing. Shown are the qPCR amplification products in arrays that are positive in Chr Y. We detected the following arrays in Chr Y: D1Z7/D5Z2/D19Z3, D4Z1, D5Z1/D19Z2, D7Z1, D9Z4, D13Z1/D21Z1, D17Z1, D18Z1, and D18Z2.