

Evaluation of qMax Gold on Azure Cielo Real-Time PCR system

8/30/2020

1. Purpose:

Compare performance of Accuris qMax Gold (PR2010-N) with SYBR Green Enzyme from Supplier R on Azure Cielo Real-Time PCR system

2. Method:

Measurement of Limit of Detection from a cDNA template dilution representing 10 copies of Human GAPDH gene. (n=10)

3. Results :

- a. Detection Rate was 100% for both the enzymes
- b. Samples amplified with qMax Gold had a CV of 1.47% vs. Supplier R had a CV of 1.48%.
- c. qMax Gold was able to detect Cq ~1.77 cycles earlier than Supplier R . Mean Cq values were 30.97 and 32.74 respectively

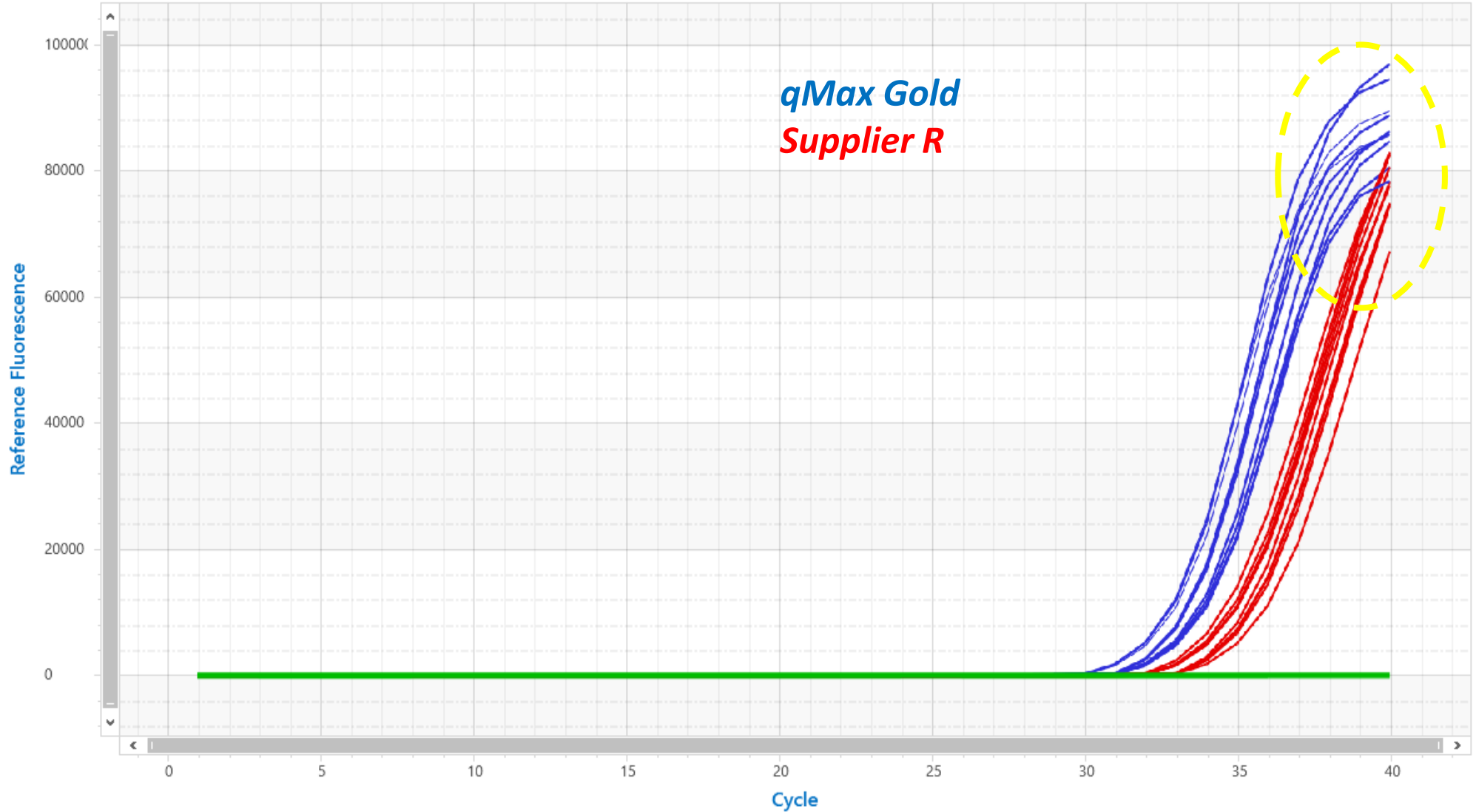
4. Conclusion & Feedback:

- a. Azure Cielo Real-Time PCR system along with Accuris qMax Gold detected sensitive amounts of DNA earlier and at a slightly higher fluorescence .

Results – Amplification Curves

Higher and earlier fluorescence readouts for qMax Gold vs Supplier R

Amplification Curves



Results – Cq values and Statistics

Earlier Cq determined for samples amplified with qMax Gold vs. Supplier R

qMax Gold

Sample#	Sample	Target	Fluorescence	Cq	CqMean	CqStd	CV
1	qMAX GOLD	GAPDH	SYBR	31.309	30.972	0.454	1.47%
2	qMAX GOLD	GAPDH	SYBR	31.275			
3	qMAX GOLD	GAPDH	SYBR	30.296			
4	qMAX GOLD	GAPDH	SYBR	30.313			
5	qMAX GOLD	GAPDH	SYBR	30.353			
6	qMAX GOLD	GAPDH	SYBR	31.167			
7	qMAX GOLD	GAPDH	SYBR	31.182			
8	qMAX GOLD	GAPDH	SYBR	31.171			
9	qMAX GOLD	GAPDH	SYBR	31.337			
10	qMAX GOLD	GAPDH	SYBR	31.321			

Supplier R

Sample#	Sample	Target	Fluorescence	Cq	CqMean	CqStd	CV
1	Supplier R	GAPDH	SYBR	33.136	32.743	0.483	1.48%
2	Supplier R	GAPDH	SYBR	32.321			
3	Supplier R	GAPDH	SYBR	32.214			
4	Supplier R	GAPDH	SYBR	32.316			
5	Supplier R	GAPDH	SYBR	32.270			
6	Supplier R	GAPDH	SYBR	33.309			
7	Supplier R	GAPDH	SYBR	33.174			
8	Supplier R	GAPDH	SYBR	33.202			
9	Supplier R	GAPDH	SYBR	32.314			
10	Supplier R	GAPDH	SYBR	33.172			