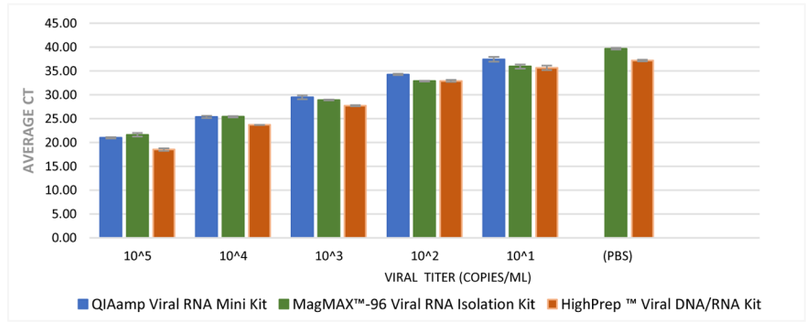
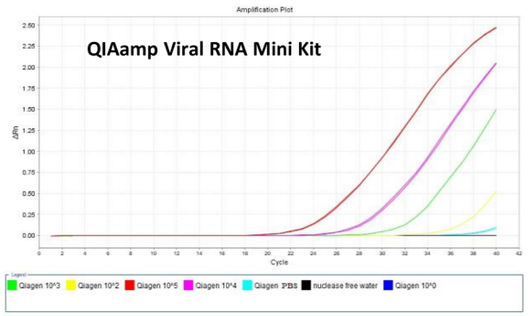
MAGBIO
"WE MAKE NGS BETTER"

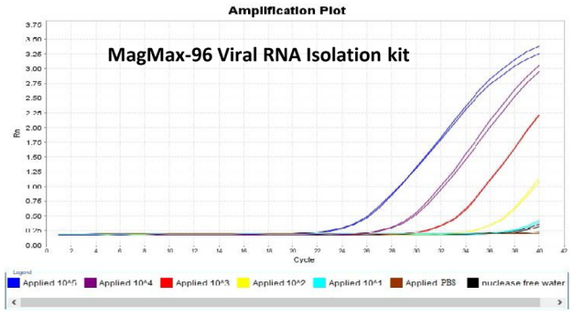
Viral RNA Extraction Kit - How Do We Fare Against Key Competitors?

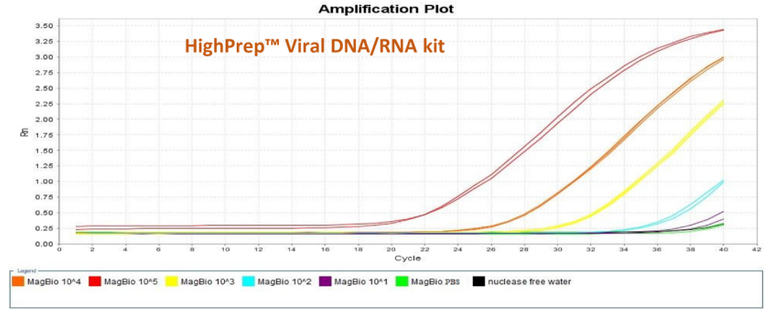
Viral Titer (Copies/mL)	QIAamp Viral RNA Mini Kit	MagMAX™-96 Viral RNA Isolation Kit	HighPrep ™ Viral DNA/RNA Kit
		(Average Ct values)**	
10^5	**20.98**	**21.60**	**18.51**
10^4	25.36	25.38	23.68
10^3	29.49	28.90	27.71
10^2	34.25	32.88	32.91
10^1	37.45	35.93	35.66
(PBS)	undetermined	39.67	37.19



** Each data point is the average of 6 replicates between two operators with 3 replicates per operator.







Concluding Remark:

MagBio's HighPrep™ Viral DNA/RNA Kit is more efficient at high viral titer (Ct=18.51) and equally sensitive** at low viral titer (Ct=35.66) when compared to the MagMax-96 Viral RNA Isolation Kit & QiAmp Viral RNA Mini Kit.**

** the kits efficiency and sensitivity may vary with the type of viral collection media.

Background:

-Human Coronavirus 229E culture was diluted to 10^5,10^4, 10^3,10^2, and 10^1 copies/mL with PBS containing background microflora from nasal swabs.

-200 uL of each spiked dilution was extracted according to MagBio's HighPrep™ Viral RNA/DNA extraction kit protocol and competitors kits protocols.

-Amplification of RNA was performed using Power SYBR Green RNA-to-CT 1 Step Kit (Applied Biosystems) -A One-step RT PCR Kit together with PanCov-03 primers.

-One-step RT PCR was performed on 7500 Real Time PCR system.

The kits sensitivity may vary with the type of viral collection media.

Each data point is the average of 6 replicates between two operators with 3 replicates per operator.