

## Product Numbers:

qPCR-50, qPCR-200,  
qPCR-50s, qPCR-200s

# Virostem

## Biotechnology

## V-Taq 2X qPCR Master Mix:

### Description:

Virostem™ V-Taq 2X qPCR Master Mix is specially formulated for high-efficiency and fast quantitative-PCR (qPCR) reactions. Our proprietary master mix contains Taq polymerase enzyme, enhancer and stabilizer proteins, as well as other additives for highly specific and robust amplification of genomic DNA, plasmids, PCR products and cDNA.

### Compatibility:

V-Taq 2X qPCR Master Mix is compatible with DNA samples isolated with standard column or precipitation-based genomic DNA purification kits, cDNA kits and rapid nucleic acid extraction buffers such as VTMs/VNATs.

For rapid nucleic acid extractions, we recommend using our specially formulated, nanodrop compatible Virolyse™ Cell Lysis Buffer (VLB-01), which is directly compatible with all Virostem PCR Master Mix products and can be used for rapid extraction of DNA, RNA and proteins directly from cells, saliva, nasal and nasopharyngeal samples in 10 minutes at room temperature and allows rapid cell to Ct detection of DNA and RNA.

### Versatility:

Our concentrated 2X formulation is highly flexible and provides 7.5µl of additional volume (in 15µl reactions) which can be used by the end-user for addition of primers, template and PCR dyes such as SYBR® and EvaGreen® or probes. Our unique buffer composition also enables highly specific amplifications without the need for extensive MgCl<sub>2</sub> optimization.

*Note: Virostem™ products are sold for research purposes only and Virostem Biotechnology™ is not responsible for their use in other third-party applications.*

### Protocol:

Master Mix contains additives that stabilize and enhance our enzymes and can be used for both short (20mins) or long (<3hrs) PCR applications. Suggested reaction and cycling conditions are:

V-Taq 2X qPCR Master Mix	7.5µl	12.5µl
Primers	200nM-500nM each	
Dyes and probes	-V-Taq 2X qPCR Master Mix (SYBR) already contains reporter dye  -For probe-based applications primer/probe ratio should be determined by the user.	
Template	-10-50ng for genomic DNA -1-10ng for cDNA or plasmids -1µl from Virolyse™ Cell Lysis Buffer	
Molecular grade water	complete to 15µl	complete to 25µl
Final Volume:	15µl	25µl

*Note: Virostem PCR kits are provided for 15µl reaction volumes.*

95°C	2 minutes	40 cycles
95°C	10 seconds	
T <sub>m</sub>	10 seconds	

*Note: Cycling conditions and efficiency should be optimized by the user for peak performance. Primer T<sub>m</sub> should be calculated based on qPCR/Onestep calculators. All Virostem™ PCR Master Mix products are stable for up to 12 months at -20°C. Avoid excessive (>5) freeze-thaw cycles for better performance and aliquot if necessary.*