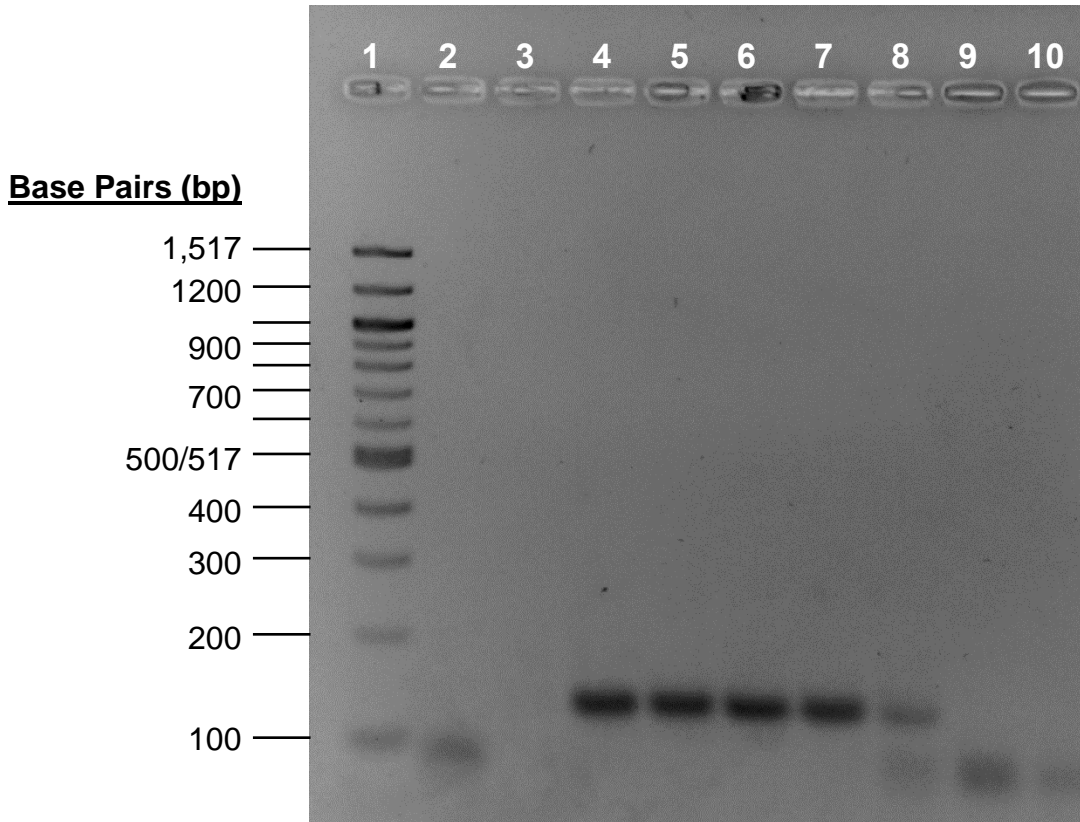


Additional File 2.

Gel electrophoresis image of r364(a) PET-PCR products



In this agarose gel, NEB Quick-Load Purple 100 bp ladder standards (#N0551) are in lane 1; the negative control for nuclease-free water in lane 2 showed a smaller amplicon (100 bp) and was therefore categorized as a false-positive qPCR assay ( $C_t$ -value=37); the negative control for human (non-plasmodial) DNA in lane 3 had no visible amplicons and was categorized as a true-negative qPCR assay ( $C_t$ -value=negative [ $>41$ ]); the positive controls for parasite DNA in lanes 4 to 8 ( $10^{+2}$  to  $10^{-2}$  pg DNA per qPCR) showed the larger amplicon (~125 bp) and were categorized as true-positive qPCR results ( $C_t$ -values=23, 27, 30, 34 and 37, respectively); the positive controls in lanes 9 and 10 ( $10^{-3}$  and  $10^{-4}$  pg DNA per qPCR) showed only the smaller amplicon (~100 bp) and thus were categorized as false-positive qPCR assays ( $C_t$ =37 and 38).