

Benchmarking data for HiDi® Taq DNA polymerase (#9201)

Mutation detection test: BRAF c.1799T>A (V600E), rs113488022, homo sapiens

target sequence: 5' . . . ATAGGTGATTTTGGTCTAGCTACAG**T**/**A**GAAATCTCGATG . . . 3'

forward primer: 5' -GGTGATTTTGGTCTAGCTACAGA-3'

reverse primer: 5' -ACCATCCACAAAATGGATCCA-3'

hydrolysis probe: 5' -ROX-TCGATGGAGTGGGTCCCATCAGTTTG-BMNQ590-3'

PCR protocol:

95°C - 2 min (initial denaturation)

95°C - 10 sec

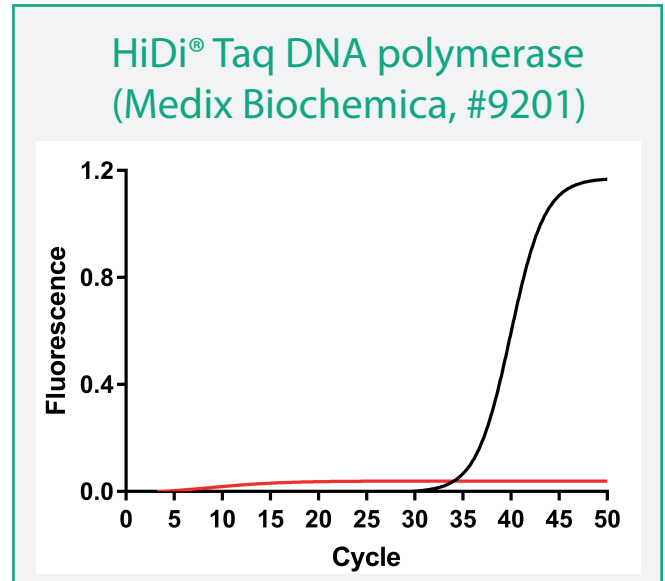
59°C - 10 sec

72°C - 30 sec (50 cycles)

Reaction buffers and final DNA polymerase concentrations were applied according to manufacturer recommendations.

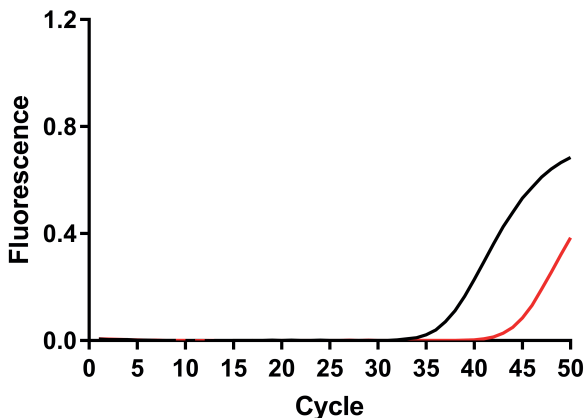
black curve - positive mutation

red curve - wildtype (mismatching primer at 3'-end)



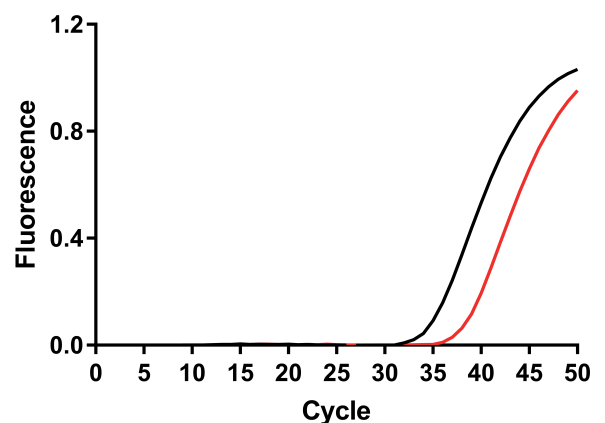
Taq DNA Polymerase

Hot Start Version (TaKaRa, #R007)



GoTaq® hot start

DNA Polymerase (Promega, #M5001)



HiDi® Taq DNA polymerase is a highly selective DNA polymerase variant, specially evolved for all assays in which high single nucleotide discrimination is required, e.g. allele specific PCR, mutation detection and genotyping.



HiDi® Taq DNA polymerase efficiently discriminates matched primers from those that have a mismatch at the 3'-terminus. It supersedes competitor products in signal generation and discrimination.