Evolved for speed
KAPA2G Fast

KAPA2G Fast DNA Polymerase is a second-generation (2G) enzyme engineered for higher processivity and speed, offering significantly faster extension rates than wild-type Taq polymerase. In addition to speed, KAPA2G Fast provides higher yields and sensitivity than competitor enzymes across a broad range of targets[1].

Gains from KAPA2G Fast:

- **Save valuable time**
  Reach extension times as low as 1 sec/kb and reduce PCR reaction times by up to 75%
- **Work with difficult templates**
  Broad coverage of both AT- and GC-rich targets
- **Continuously improve your PCR assay development**
  HotStart and ReadyMix formulations available

Reduced cycling times up to 75%

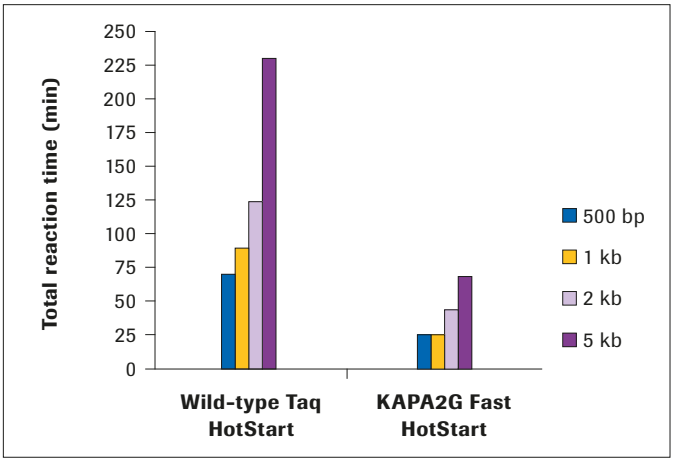

Figure 1: Total PCR times for the generation of different sized amplicons for human genomic DNA (≤3.5 kb) and lambda (≤5 kb) using wild-type Taq DNA polymerase and KAPA2G Fast DNA Polymerase. The amount of time that can be saved using protocols based on wild-type Taq is limited by the extension rate of the enzyme. KAPA2G Fast DNA Polymerase is based on a second-generation polymerase with an ability to synthesize DNA faster than wild-type Taq or other DNA polymerases. Reaction times are based on a 35-cycle program using the cycling profile recommended by each kit manufacturer[1].

[1] Reference: data on file at Roche.

For further processing only.

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Increased speed and performance

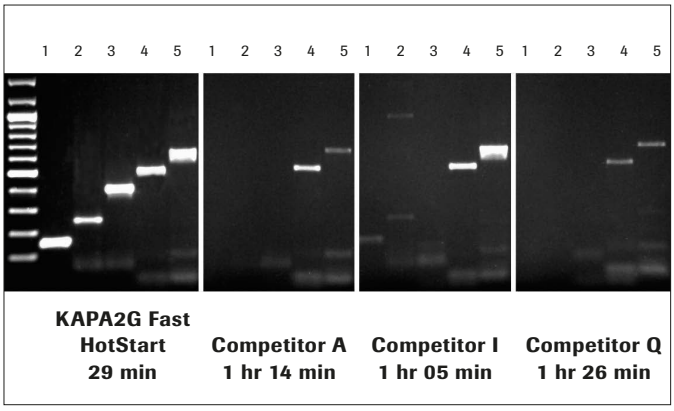

Figure 2: Amplification of 5 human gene fragments using KAPA2G Fast HotStart or competitor hot-start Taq formulations. Reactions (25 µL) contained 5 ng human genomic DNA and 0.5 units (KAPA2G Fast HotStart and Competitor I) or 0.625 units (Competitor A and Q) enzyme. For amplicons with a GC content >65% (lanes 2 and 3), 7.5% DMSO was included in reactions. A 3-step cycling profile (35 cycles) with 15 sec denaturation (95˚C) and 15 sec annealing (60˚C) per cycles was used for all enzymes. The extension (72˚C) was 1 sec/cycle for KAPA2G Fast HotStart and 60 sec/cycle for competitor enzymes. The total reaction time for each enzyme is indicated[1].

Ordering information

Product	Pack size	Catalog number
KAPA2G Fast HotStart PCR Kit	5 kU	08 041 202 001
KAPA2G Fast HotStart ReadyMix	12.5 ml	08 041 172 001

[1] **Reference**
Data on file at Roche.

Regulatory disclaimer
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