MGB Eclipse® Probes

GMP-manufactured qPCR components for use in clinical and molecular diagnostics

We have combined our proven oligo manufacturing expertise and ISO 13485 certified production processes to deliver MGB Eclipse Probes and companion primers for clinical and molecular diagnostics.

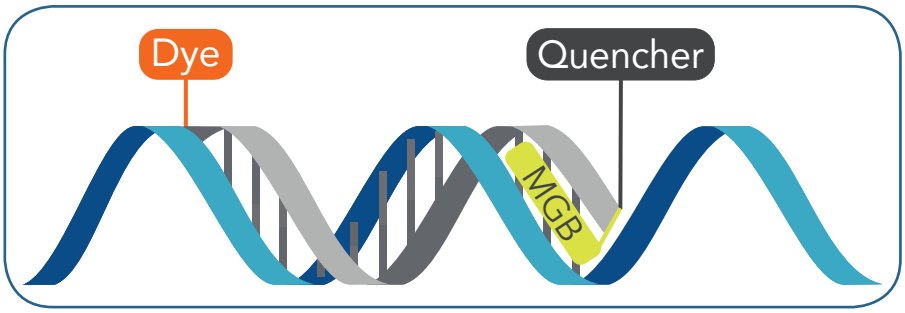

Figure 1. MGB Eclipse Probes. The incorporation of a minor groove binder (MGB) stabilizes probe-target hybridization and increases melting temperature, allowing the use of shorter probes which are better suited for allelic discrimination and targeting AT-rich regions in qPCR assays.

benefits

Transition from research to clinical diagnostics while maintaining robust assay performance

Begin your testing sooner with faster, more reliable delivery

Save money and resources with a more affordable cost per reaction

Discover more at **www.idtdna.com/MGB**

Our range of fluorophore choices allows you to ensure compatibility with your instrument and more easily design your multiplex assays. If the fluorophore you need is not listed, contact **GMPinfo@idtdna.com** for a custom quote.

MGB Eclipse Probes

- 10–30 bases in length
- Licensed for use in human *in vitro* diagnostics (IVD) applications
- FAM, HEX, TET, or Yakima Yellow® dyes available
- Final yields of 6, 20, or 50 nmol

GMP companion primers

- Standard desalt or HPLC purification
- Final yields of 25, 80, or 200 nmol

Estimated turnaround time

- Standard desalted primers: 2 weeks
- HPLC-purified probes: 3 weeks

Performance in genotyping applications

Assays with IDT MGB Eclipse Probes and companion primers demonstrate equivalent specificity to industry-standard assays when making genotyping calls for KRAS variants (Figure 2). End-point fluorescent signal intensities were similar or higher using MGB Eclipse Probes.

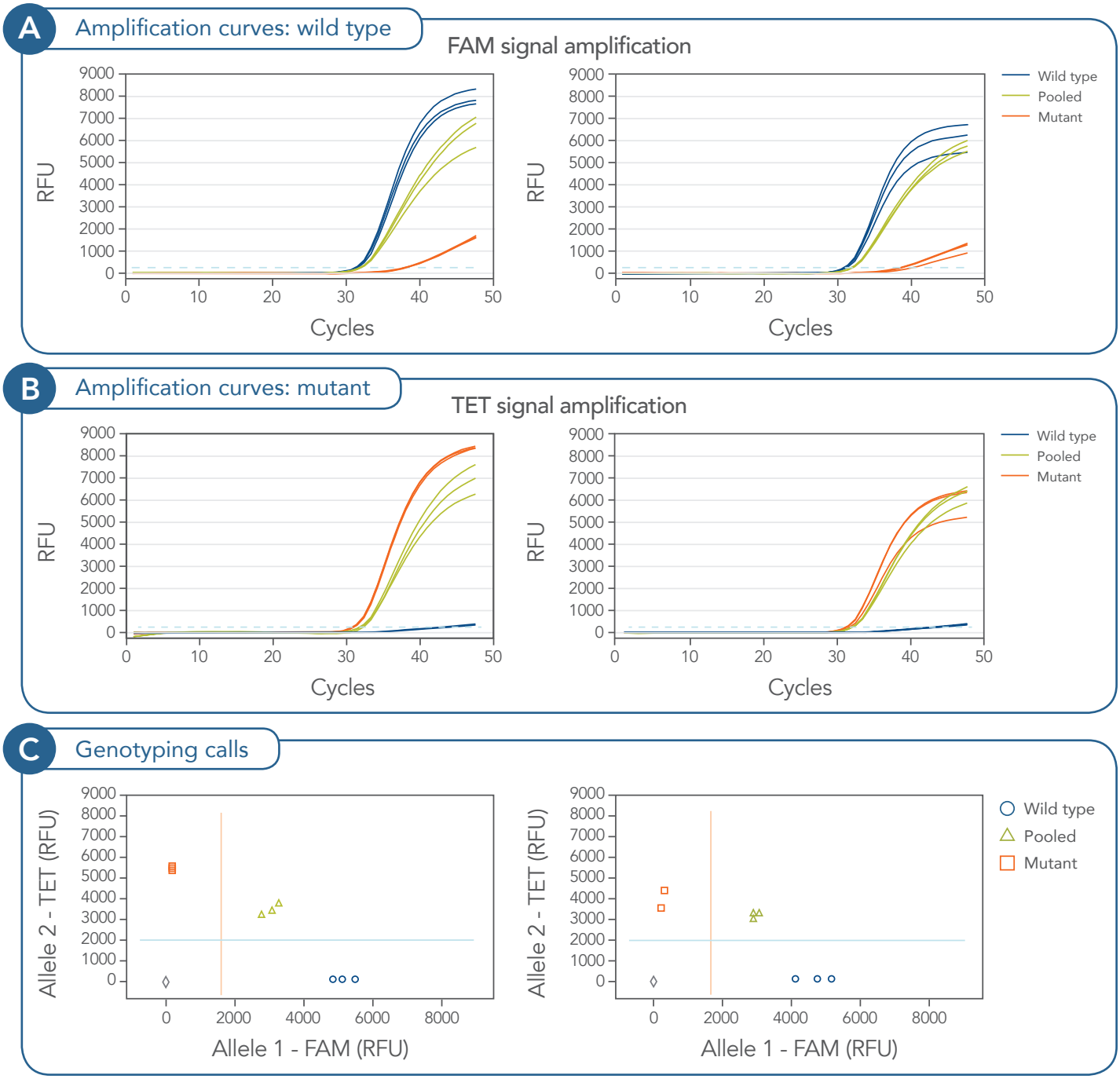

Figure 2. Equivalent results for assays with IDT MGB Eclipse Probes and assays for Research Use Only. KRAS G12R assays comprised of MGB Eclipse Probes (FAM dye—wild-type probe; TET dye—mutant probe) and primers manufactured by IDT or assays for Research Use Only were used. Reactions (10 µL) were run with 104 copies of wild-type, mutant, or pooled wild-type/mutant template (gBlocks Gene Fragments; IDT) and TaqMan® Gene Expression Master Mix (Thermo Fisher Scientific) on a CFX384 Touch™ Real-Time PCR Detection System (Bio-Rad). Cycling conditions were 3 min. 95°C; 50 x (10 sec. 95°C, 30 sec. 60°C). Amplification curves for (**A**) wild-type and (**B**) mutant alleles demonstrated comparable results for MGB Eclipse Probes from IDT (left) and assays for Research Use Only (right). (**C**) Clear genotyping calls were madefor MGB Eclipse Probes from IDT (left) and assays for Research Use Only (right).

For more information and to order, visit **www.idtdna.com/MGB**

For Research Use Only. Not for use in diagnostic procedures.

* 1 0 7 8 0 9 1 *