AccuStart Genotyping ToughMix®

AccuStart Genotyping ToughMix enables probe-based genetic analysis (SNP detection and allelic discrimination) directly from crude extracts, DBS punches, plant tissue and clinical specimens

FEATURES AND BENEFITS:

- Optimized buffer chemistry destabilizes single base-pair mismatch probes, providing superior allelic discrimination and improved cluster separation for critical, single-nucleotide polymorphism (SNP) detection assays
- Sensitive, precise detection with ultrapure AccuStart II enzyme technology maximum-yielding Taq DNA polymerase mutant controlled by stringent, multi-epitope antibody hotstart
- ToughMix reagent technology neutralizes a broad spectrum of PCR inhibitors common in plant and animal tissues, environmental sources, clinical specimens and complex food matrices
- Easy-to-use 2x concentrated SuperMix with AccuVue plate loading dye and pre-blended passive reference dye simplifies reaction setup
- Supports efficient vortex mixing with proprietary anti-foaming technology

DESCRIPTION:

Genotyping ToughMix is a 1-tube qPCR SuperMix reagent compatible with all dual-label (hydrolysis) probe chemistries for both fast and conventional PCR cycling protocols or instruments. This proprietary formulation has been rigorously optimized to destabilize single base-pair mismatches to ensure precise allelic discrimination and cluster separation with SNP detection assays. The reagent is provided as a 2x concentrated readyto-use reaction cocktail that contains all required reaction components, except primers, probe(s), and DNA template. Inert AccuVue plate loading dye helps to minimize pipette error and provides visual confirmation of thorough mixing.



ToughMix vs Competitor

Influence of PCR inhibitor



Figure 1 Comparison to conventional master mixes AccuStart Genotyping ToughMix stands up to the challenge where other genotyping master mixes fall apart. ToughMix can be used with clean templates where it generates higher fluorescent signal and tighter clusters than the leading competitors. Figure 2 Comparison to conventional master mixes. In the presence of a common PCR inhibitor, humic acid (50 ng/µl), the competitors system is completely shut down while ToughMix delivers robust, accurate results.



ORDER INFO

| Product Name | Quantabio Catalog Number | Size |
|---------------------------------------|--------------------------|----------------------------------|
| Genotyping ToughMix - 250 R | 95115-250 | 250 x 20 µl rxns (2 x 1.25 ml) |
| Genotyping ToughMix - 1250 R | 95115-012 | 1250 x 20 µl rxns (10 x 1.25 ml) |
| Genotyping ToughMix - 5000 R | 95115-05K | 5000 x 20 µl rxns (1 x 50 ml) |
| Genotyping ToughMix, ROX - 250 R | 95116-250 | 250 x 20 μl rxns (2 x 1.25 ml) |
| Genotyping ToughMix, ROX - 1250 R | 95116-012 | 1250 x 20 µl rxns (10 x 1.25 ml) |
| Genotyping ToughMix, ROX - 5000 R | 95116-05K | 5000 x 20 µl rxns (1 x 50 ml) |
| Genotyping ToughMix, Low ROX - 250 R | 95117-250 | 250 x 20 µl rxns (2 x 1.25 ml) |
| Genotyping ToughMix, Low ROX - 1250 R | 95117-012 | 1250 x 20 μl rxns (10 x 1.25 ml) |
| Genotyping ToughMix, Low ROX - 5000 R | 95117-05K | 5000 x 20 µl rxns (1 x 50 ml) |

 $\ensuremath{\mathsf{Trademarks:}}$ ToughMix $^{\otimes}$ is a registered trademark of QIAGEN Beverly, Inc.

Quantabio products are intended for molecular biology applications. The products are not intended for the diagnosis, prevention or treatment of a disease. MK-SF-0022 REV 01 AccuStart Genotyping 0918