

KlearKall[™] Mastermix

KlearKall Mastermix contains our proprietary KlearTaq[™] Hot Start DNA polymerase along with dNTPs and ROX[™] reference dye in a highly optimized reaction buffer that is engineered to provide high sensitivity, specificity and reproducibility. It performs exceptionally well in end-point PCR reactions and many real-time PCR applications as well, and it represents a highly cost-effective alternative for researchers running TaqMan[®] end-point and real-time assays. The Mastermix formulation gives users the convenience of a single liquid addition that speeds up the PCR setup process and brings greater consistency across all PCR reactions.

Produced by LGC Genomics, KlearKall Mastermix is available for sale globally. Outside the United States it is sold with no restrictions on its use. Within the United States, per our current licensing agreement with Life Technologies, Inc., it is sold for research use, and for seed development and production applications only. Specifically KlearKall Mastermix cannot be sold for clinical applications and / or food testing applications within the United States.

Performance validated in our laboratories we have tested KlearKall Mastermix across a wide range of templates and primer combinations in probe based TaqMan[®] reactions, and in all cases it has demonstrated equivalent if not improved performance relative to the TaqMan[®] Mastermix (see typical results below).

Note: KlearTaq enzyme requires an activation step at 95°C for 15 minutes at the beginning of the thermal cycling program. Also, we use dTTP in our KlearKall Mastermix as we have found it improves reaction sensitivity and efficiency when compared to mixes containing dUTP. The following cluster diagrams show the use of KlearKall Mastermix + ROX in a TaqMan[®] end-point SNP genotyping assay and compares performance to both TaqMan[®] Universal Mastermix and end-point Mastermix.

Reaction comparison



DNA extracted from corn



DNA extracted from human tissue



DNA extracted from bovine tissue

Storage conditions

Store at - 20°C until ready for use. KlearKall Mastermix when stored properly is stable for a minimum of 6 months. Once thawed the mix is stable at 4°C for up to a week. While repeated freeze-thaw cycles have been shown to not damage the performance of the product, it is good practice to minimize the number of freeze-thaw cycles. To prevent degradation of the ROX reference dye, avoid exposure to direct sunlight.

Quality control

Each batch of KlearKall Mastermix is tested for performance in a TaqMan[®] end-point reaction using an ABI[®] SNP genotyping probe and primer set. The mix is passed only when it results in an accurate SNP call based on control DNA, no visible Non-Template Control (NTC) movement, and well defined clusters relative to a benchmark standard.

Ordering information

Catalogue number	Description
KBS-1002-001	2X KlearKall 100 Mastermix + ROX (2.5 mL)
KBS-1002-002	2X KlearKall 200 Mastermix + ROX (5 mL)
KBS-1002-003	2X KlearKall 1,000 Mastermix + ROX (25 mL)
KBS-1002-004	2X KlearKall (Custom pack size) Mastermix + ROX
KBS-1002-005	2X KlearKall 40,000 Mastermix + ROX (1 L)
KBS-1002-006	2X KlearKall 2,000 Mastermix + ROX (50 mL)
KBS-1002-007	2X KlearKall 8,000 Mastermix + ROX (200 mL)

Give KlearKall a try today and start saving! Free trial samples available upon request.

For more details please contact your local representative or visit our website.



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