

# CelGREEN Universal qPCR mix

*Intercalating dye-based qPCR mix compatible with all qPCR cyclers*

## **Why choose CelGREEN Universal qPCR mix?**

- » Proprietary intercalating dye that does not inhibit PCR
- » Fast elongation results in early Ct values
- » Superior sensitivity on low copy number templates
- » Enhanced specificity supported by a hot-start enzyme
- » Good performance on difficult templates
- » Compatible with all qPCR cyclers

*CelGREEN Universal qPCR mix combines an enhanced buffer system containing a proprietary non-inhibitory intercalating dye with a hot-start polymerase to result in fast, highly specific PCR with market-leading sensitivity.*

## **Applications**

- » Gene expression analysis
- » Absolute quantification
- » High through-put qPCR from DNA/cDNA/viral DNA
- » Detection of low copy number templates
- » Crude sample PCR

## **Technical specification**

<b>Charateristic</b>	<b>Detail</b>
Instrument compatibility	For use with all real time PCR instruments (supplied with a separate tube of rox dye)
Amplification detection	Intercalating dye (FAM channel)
Format	Ready-to-use 2x mix
Polymerase	CelTaq HS DNA polymerase
Increased specificity	Hot-start modification
Cycling speed	Standard and fast modes
Shelf life	12 months (if stored correctly)

### Contact Details

E: [info@celticmolecular.com](mailto:info@celticmolecular.com) T: +27 21 21 762 7703



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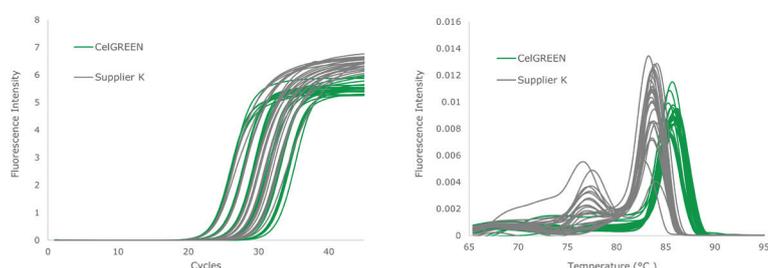
## Description

CelGREEN Universal qPCR mix utilizes a proprietary intercalating dye that together with a fast hot-start enzyme and optimized buffer system achieves superior sensitivity and specificity.

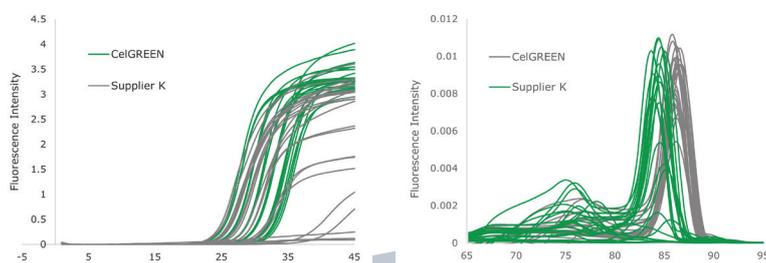
The ready-to-use real time PCR mix performs well on difficult templates (rich in GC/AT content) and gives reproducible, robust amplification of DNA, cDNA and viral DNA targets. The carefully balanced buffer does not require additional optimization and contains all components required for successful qPCR, except the template and primer pair. Unlike other popular fluorescent dyes, the CelGREEN mix contains a proprietary intercalating dye that does not inhibit PCR.

The Universal qPCR mix is supplied with a separate tube of 50µM ROX dye that may be used with instruments requiring ROX as a passive reference dye. CelGREEN Universal qPCR mix is suitable for use on all real time PCR cyclers.

### ACTG amplification plot and melt curve analysis



### PGK1 amplification plot and melt curve analysis



### Fig. 1 CelGREEN Universal qPCR mix has excellent hot-start activity with high sensitivity

The ACTG and PGK1 genes were amplified in triplicate from cDNA generated from mouse liver at 6 concentration on the LC96 instrument. To test the efficacy of the hot-start enzyme, an additional 10min pre-incubation at 50 °C was added prior to the standard cycling conditions. The CelGREEN Universal qPCR mix showed better hot-start activity during amplification of both ACTG and PGK1 genes than Supplier K, by minimal primer dimer formation. The CelGREEN mix also showed greater sensitivity by amplifying low abundance templates especially for the PGK1 gene.

## Ordering info

Cat. no	Pack size
CM3111-0200	200rxns (2ml)
CM3111-0500	500rxns (5ml)
CM3111-1000	1000rxns (10ml)

More information at

[www.celticmolecular.com/product/celgreen-universal-qpcr-mix-2x/](http://www.celticmolecular.com/product/celgreen-universal-qpcr-mix-2x/)

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