

# CelTaq DNA Polymerase

*DNA Polymerase for routine PCR – everyday*

## **Why choose CelTaq DNA polymerase?**

- » Enhanced sensitivity, speed and yield
- » Efficient amplification of up to 6kb amplicons
- » Superior performance on high GC/AT templates
- » Balanced salt solution with proprietary enhancers and stabilizers eliminates the need for buffer optimization
- » Use with current PCR conditions (compatible with standard and fast cycling)

*CelTaq DNA Polymerase is a reliable, cost-effective solution for everyday PCR and together with an enhanced buffer system results in robust amplification of difficult templates with increased speed, yield and sensitivity.*

## **Applications**

- » Routine PCR
- » High throughput screening
- » TA-cloning
- » Genotyping
- » Library construction
- » Methylated DNA
- » Crude extract PCR

## **Technical specification**

Charateristic	Detail	Charateristic	Detail
Format	Enzyme and buffer separate	Fidelity (vs. Taq DNA polymerase)	1x
Polymerase concentration	5U/μl	Proofreading activity	No
Buffer concentration	5x	Exonuclease activities	5'-3' exonuclease activities
Direct gel-loading	No	Amplicon range	Up to 6kb
Error rate	1 error per 2.0 x 10 <sup>5</sup> nucleotides incorporated	Product 3' ends	A-tailed
Increased specificity	No hot-start modification	Shelf life	12 months (if stored correctly)

### Contact Details

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## Description

CelTaq DNA Polymerase is a high-performance, robust PCR enzyme that is suitable for use in all basic PCR applications including genotyping, high throughput PCR, library construction and TA cloning.

The optimised 5x buffer system (containing 5mM dNTPs, 15mM MgCl<sub>2</sub>) comprises of a balanced salt solution, supplemented with enhancers and stabilizers enabling consistent, reliable amplification of a broad range of templates (that differ in length and GC content). The system produces high yields under standard and fast cycling conditions to efficiently amplify targets up to 6kb in length.

The enzyme is stable at room temperature for 4 weeks and is extensively purified via chemical, physical and enzymatic removal of host DNA to yield ultra-low background.



**Fig. 1 CelTaq DNA Polymerase sensitivity and specificity**

A 1kb fragment of the GAPDH gene was amplified from a serial dilution of genomic mouse DNA and analysed on a 1% agarose gel. CelTaq DNA polymerase performs equal in specificity and sensitivity to the equivalent product from supplier K.

## Ordering info

Cat. no	Pack size
CM2211-0500	500 units
CM2211-1000	1000 units

More information at

[www.celticmolecular.com/product/celtaq-dna-polymerase/](http://www.celticmolecular.com/product/celtaq-dna-polymerase/)

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