

# High Quality PCR Performance

MolTaq & Hot MolTaq
Highly Active Taq DNA Polymerases





#### **Product Features**

- Extremely active Taq polymerases
- PCR enhancer for amplification of difficult DNA templates
- ✓ Save pipetting and direct gel loading
- ✓ Batch to batch quality
- ✓ PCR and Real-TimePCR

## **MolTaq & Hot MolTaq:**

# **Highly Active Taq DNA Polymerases**

Molzym's MolTaq and Hot MolTaq are highly active and robust, genetically engineered Taq polymerases suitable for a broad range of applications, including routine PCR, Real-Time PCR, multiplex PCR, nested PCR and many other issues.

MolTaq serves a variety of standard and specialized PCR applications, for instance, SNP analysis, incorporation of modified nucleotides at higher rates, introduction of new restriction sites or site-specific mutations, gene expression studies, food and water quality control and sequencing reactions.

Further, for adaptation of Mg<sup>2+</sup> concentration special **MolTaq basic** and **Hot MolTaq basic** kits are available.

## **MolTaq & Hot MolTaq properties:**

- 5'-3' polymerase activity for efficient amplification
- 5'-3' exonuclease activity (strand displacement)
- 3' terminal deoxynucleotidyl transferase activity (addition of single dATP to the duplex DNA)
- Incorporation of modified nucleotides at high rates
- Amplification of up to 9 kb from lambda DNA and up to 5 kb from genomic DNA

Each production lot is manufactured under strict quality control management ensuring high and consistent product quality.

#### **Products**

Kits are available to meet your needs for high performance PCR amplification.

**MolTaq** is the highly processive Taq DNA polymerase kit supplying PCR buffer (1.5 mM MgSO<sub>4</sub>) and PCR enhancer for difficult, GC-rich templates.

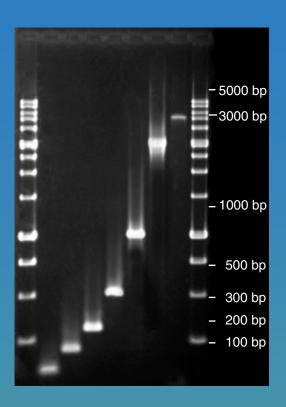
Hot MolTaq DNA Polymerase reduces unspecific amplification and allows the convenient PCR setup at ambient temperature.

MolTaq basic and Hot MolTaq basic enable optimisation of PCR amplification by variation of supplied concentrated magnesium (basic buffer and extra 100 mM MgCl<sub>2</sub> solution).

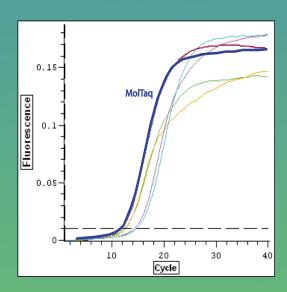
Control of accurate pipetting and direct gel loading for rapid analysis is possible using the red dye supplied with **MolTaq**<sup>RED</sup> and **MolTaq**<sup>RED</sup> basic kits.

## Overview of MolTaq & Hot MolTaq products

Content	Mol- Taq	Mol- Taq basic	Mol- Taq	Mol- Taq basic	Hot Mol- Taq	Hot Mol- Taq basic
Taq DNA polymerase	+	+	+	+	ı	-
Hot Start Taq DNA polymerase	-	-	1	ı	+	+
PCR buffer (1.5 mM Mg <sup>2+</sup> final concentration)	+	-	+	ı	+	-
Mg <sup>2+</sup> -free PCR buffer, 100 mM MgCl <sub>2</sub> solution	-	+	-	+	-	+
PCR enhancer	+	+	+	+	+	+
Red dye	-	-	+	+	-	-



Gel electrophoretic analysis of amplicons of 100 to 5,000 bp fragment size generated with MolTaq Mastermix



Real-Time PCR showing high amplification activity of MolTaq compared to other suppliers of Taq DNA polymerases

## **Order Information:**

Product	Content	Order No.					
MolTaq Thermostable DNA Polymerase							
MolTaq	1000 Units	P-010-1000					
Taq DNA polymerase, buffer (1.5 mM MgSO <sub>4</sub> final), PCR enhancer	5000 Units	P-010-5000					
MolTaq basic	1000 Units	P-016-1000					
Taq DNA polymerase, magnesium-free buffer, 100 mM MgCl <sub>2</sub> , PCR enhancer	5000 Units	P-016-5000					
MolTaq <sup>RED</sup>	1000 Units	P-040-1000					
Taq DNA polymerase, buffer (1.5 mM MgSO <sub>4</sub> final), PCR enhancer, red dye	5000 Units	P-040-1000					
MolTaq <sup>RED</sup> basic	1000 Units	P-017-1000					
Taq DNA polymerase, magnesium-free buffer, 100 mM MgCl <sub>2</sub> , PCR enhancer, red dye	5000 Units	P-017-5000					
Hot MolTaq Hot Start Thermostable DNA Polymerase							
Hot MolTaq	1000 Units	P-060-1000					
Hot Start Taq DNA polymerase, buffer (1.5 mM MgSO <sub>4</sub> final), PCR enhancer	5000 Units	P-060-5000					
Hot MolTaq basic	1000 Units	P-065-1000					
Hot Start Taq DNA polymerase, magnesi- um-free buffer, 100 mM MgCl <sub>2</sub> , PCR en- hancer	5000 Units	P-065-5000					

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V2.0



