



5X EZ PCR Master Mix Load Ready™ (12.5 mM MgCl₂)

Cat. No.	Pack Size	Conc. (MgCl ₂)
RG-1000-01	240 µL (60 reactions)	12.5 mM

For *in vitro* use only

Description:

5x EX PCR Master Mix, Load Ready, is a premixed ready-to-use solution containing all reagents required for PCR (except template, primers and water), additional compound needed for direct loading onto agarose gel and two tracking dyes (blue and yellow) that allow to monitor progress during electrophoresis.

Applications:

- Suited for a wide range of PCR assays

Reagent Composition:

- **Taq DNA polymerase**
- **5 x Reaction Buffer B**
0.4 M Tris-HCl, 0.1 M (NH₄)₂SO₄, 0.1% w/v Tween-20
- **12.5 mM MgCl₂**
1 x PCR solution – 2.5 mM MgCl₂
- **1 mM dNTPs of each**
1 x PCR solution – 200 µM dATP, 200 µM dCTP, 200 µM dGTP and 200 µM dTTP
- **Blue dye**
Migration equivalent to 3.5-4.5 kb DNA fragment
- **Yellow dye**
Migration rate in excess of primers in 1% agarose gel: <35-45 bp
- **Compound that increases sample density for direct loading**

Shipping and Storage conditions:

Routine storage: -20°C

Shipping and temporary storage for up to 1 month at room temperature or storage for up to 6 months at 2-8°C has no detrimental effects on the quality of 5x EZ PCR Master Mix, Load Ready.

Safety warnings and precautions:

This product and its components should be handled only by persons trained in laboratory techniques. It is advisable to wear suitable protective clothing, such as laboratory overalls, gloves and safety glasses. Care should be taken to avoid contact with skin or eyes. In case of contact with skin or eyes, wash immediately with water.

Recommended PCR reaction mix:

Component	Volume	Final conc.
5x EZ PCR Master Mix, Load Ready	4 µl	1 x
Forward primer (10 pmol/µl)	0.2-0.6 µl	0.1-0.3 µM
Reverse primer (10 pmol/µl)	0.2-0.6 µl	0.1-0.3 µM
Template DNA	x µl	5-50 ng/µl
Add H ₂ O	Up to 20 µl	

Recommended PCR cycles:

Operation	Temp.	Time	Cycles
Initial denaturation	95°C	30-300 sec	1
Denaturation	95°C	15-45 sec	25-30
Annealing	54-66°C	15-45 sec	
Elongation	72°C	20-240 sec	
Final elongation	72°C	30-600 sec	

Recommendations:

We recommend using 5x EZ PCR Master Mix, Load Ready in any PCR application that will be visualized by agarose gel electrophoresis and ethidium bromide staining.

We do not recommend using the 5x EZ PCR Master Mix Load Ready for PCR reactions where detergent free buffer system is required.

5x EZ PCR Master Mix, Load Ready, is not recommended for use in applications where spectro-photometric measurements (absorbance or fluorescence) are necessary because yellow and blue dyes can interfere with these applications.

Some applications this product is used in may require a license which is not provided by the purchase of this product. Users should obtain the license if required.