

**Ruby Buffer**

Cat. No.	Amount
PCR-272S	5 x 1,2 ml
PCR-272-10ML	10 ml
PCR-272-100ML	100 ml

For general laboratory use.

Shipping: shipped at ambient temperature

Storage Conditions: store at 4 °C or -20 °C

Shelf Life: 12 months

Form: Liquid

Concentration: 10x conc.

Description:

Ruby PCR Buffer contains gel loading buffer and an inherent red dye allowing the direct loading of the PCR product into the gel. The red dye allows an easy visual control during PCR set-up and in combination with the density reagent the direct loading of the reaction product into the gel.

The buffer guarantees robust and reliable amplification results in almost all PCR applications. It contains a well-balanced ratio of potassium-, ammonium- and magnesium-ions to ensure high specificity and minimal by-product formation without the need of additional optimization steps.

Content:**Ruby PCR Buffer (green cap)**

200 mM Tris-HCl, KCl, $(\text{NH}_4)_2\text{SO}_4$ and 20 mM MgCl_2 red dye and density reagent

Optimization of MgCl_2 concentration:

A final Mg^{2+} concentration of 2.0 mM is recommended for most PCR applications. For an individual optimization of the reaction buffer add 25 mM MgCl_2 stock solution (PCR-266) as shown in the table below.

final MgCl_2 conc.	20 μl final assay volume	50 μl final assay volume
2 mM	-	-
3 mM	0.8 μl	2.0 μl
4 mM	1.6 μl	4.0 μl
5 mM	2.4 μl	6.0 μl