

Product Information Sheet

Product Name: 5X MeanGreen Buffer*

Concentration: 5X

Ordering Information:

Item Number	Components and Volume
RB-WD-20mL	20 x 1mL
SS-RB-WD-0.1mL	1 x 100uL

Storage and Handling:

Store at -20°C upon arrival.

Product Description:

Empirical's 5X MeanGreen Buffer is supplied as a 5X reaction buffer with 7.5mM MgCl₂. 5X MeanGreen Buffer contains blue and yellow loading dyes and a density agent that allow reactions to be loaded directly onto agarose gels and make monitoring progress during electrophoresis easy. These dyes do not obscure visualization of DNA bands on the gel as the dye fronts run outside the size of most PCR products.

Reaction set-up: The following general reaction set up is recommended but can vary depending on the enzyme, template and primers being used. This set up if for 50µl reaction volume.

Reaction Set-Up for a 50uL Reaction:

Component	Volume	Final Concentration
5X MeanGreen Buffer	10 µl	1X
Upstream Primer, 10µM	1.0-5.0 µl	0.2-1.0µM
Downstream Primer, 10µM	1.0-5.0 µl	0.2-1.0µM
dNTP, 10mM	1-4 µl	200-800µM
DNA Template	X µl	>0.5ng DNA
Taq DNA Polymerase, 5U/µl	0.2-1 µl	1U-5U
Nuclease Free Water to volume	50 µl	N.A.

Thermal cycling conditions: The following general cycling conditions are recommended but can vary depending on the template and primers being used.

Cycling Step	Temperature	Holding Time	Cycles
Initial Denaturation	94°C	30 sec - 2min	1
Denaturation	94-96°C	15 - 30sec	30
Annealing°	55-65°C	15 - 60sec	
Extension	70-72°C	1min/kb	
Final Extension	70-72°C	0-10min	1

°Annealing will depend on primer length and composition. Generally, begin 5°C below primer T_m.

* This product is for "Research Use Only. Not for use in diagnostic procedures".
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