

Product Information Sheet

Product Name: 5X Multiplex Master Mix

Item Number:

Item Number	Rxns	Qty
TP-MP-100	100	(1 x 1mL)
TP-MP-500	500	(5 x 1mL)
TP-MP-1000	1000	(10 x 1mL)
SS-TP-MP-10	10	(1 x 100uL)

Concentration: 5X

Storage and Handling: Store at -20°C upon arrival. Minimize number of freeze thaw cycles by storing in working aliquots.

Product Description: 5X Multiplex Master Mix is a **Detergent-free** formulation optimized for maximum amplification of two or more products simultaneously. It contains optimal concentrations of dNTPs, salts, stabilizers, and Taq DNA polymerase. The 5X concentration allows maximum volume for multiple primer sets and is ideal for automated systems due to its detergent-free formula.

Reaction set-up: Mix the Master Mix by inverting. Calculate the amount of components based on the following table and assemble on ice. General guidelines per 50uL reaction:

Component	Volume	Final Concentration
5X Multiplex Master Mix	10 µl	1X
Upstream Primer	0.5-5.0 µl	0.1-1.0µM
Downstream Primer	0.5-5.0 µl	0.1-1.0µM
DNA Template	X µl	1-500ng gDNA; 2-50pg pDNA
Nuclease Free Water	to 50 µl	N.A.

Thermal cycling conditions: The following general cycling conditions are recommended but can vary depending on the template and primer compositions.

Cycling Step	Temperature	Holding Time	Cycles
Initial Denaturation	94-95°C	15sec – 2min	1
Denaturation	94-95°C	15-30sec	30
Annealing**	55-65°C	15-30sec	
Extension	68-72°C	1min/kb	
Final Extension	68-72°C	5-10min	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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