**Print Only Page 2 for Customer**

**Concentration:** Multiplex MasterMix: 5X

**Storage and Handling:**

Upon arrival store at -20°C for provided expiration date, Room Temperature for 30 Days, 4°C for up to 60 days. Minimize Freeze thaw of master mix to avoid loss of performance

**Ordering Information:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Item Number** | **Number of Tubes and Volume** | **Total number of reactions which can be obtained when using the following reaction sizes** | | |
| **50μL Reaction** | **20μL Reaction** | **10μL Reaction** |
| TP-MP-500 | 5X Multiplex MasterMix: 5 x 1mL | 500 | 1250 | 2500 |
| TP-MP-1000 | 5X Multiplex MasterMix: 10 x 1mL | 1000 | 2500 | 5000 |

**Product Description:**

5X Multiplex MasterMix is optimized for maximum amplification of multiple PCR products simultaneously. It contains optimal concentrations of dNTPs, salts, stabilizers, and Taq DNA polymerase. The 5X concentration allows maximum volume for multiple primer sets.

**Protocol:** Minimize Freeze thaw of master mix to avoid loss of performance. The following reaction set up and general cycling conditions are recommended but can vary depending on the template and primers being used.

**Reaction set-up for a 50uL Reaction:**

|  |  |  |
| --- | --- | --- |
| Component | Volume | Final Concentration |
| 5X Multiplex MasterMix | 10 µl | 1X |
| Upstream Primer, 10µM | 0.5-5.0 µl | 0.1-1.0µM |
| Downstream Primer, 10µM | 0.5-5.0 µl | 0.1-1.0µM |
| DNA Template | X µl | > 25ng DNA |
| 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°C-95°C | 2min | 1 |
| Denaturation | 94-96°C | 15 - 30sec | 40 |
| Annealing# | 55-65°C | 15 - 60sec |
| Extension | 70-72°C | 1min/kb |
| Final Extension | 70-72°C | 5-10min | 1 |
| #Annealing will depend on primer length and composition. Generally, begin 5°C below primer Tm. | | | |