

## UNIVERSAL REAL TIME PCR MASTERMIX – 2X

### CAT. NO:

20R-02-20 (20 RXN)

20R-02-100 (100 RXN)

### PRODUCT DESCRIPTION

The ready to use system is designed for all applications required for Real-Time PCR. Hot-start Taq DNA polymerase is activated by heating up the reaction 10 min at 95 °C.

### PRODUCT SPECIFICATION

During the PCR reaction, the DNA polymerase cleaves the probe at the 5' end and separates the reporter dye from the quencher dye only when the probe hybridizes perfectly to the target DNA. This cleavage results in the fluorescent signal which is monitored by Real-Time PCR detection system. An increase in the fluorescent signal (CT) is proportional to the amount of the specific PCR product.

HotStart Taq DNA Polymerase enzyme contains Anti-Taq monoclonal antibodies to ensure specificity and thermostability. Real Time Universal Master Mix contains 0.2 mM of each dNTP, 3 mM MgCl<sub>2</sub> and HotStart Taq DNA Polymerase.

### SYSTEM CONTENTS

| Reagents                              | 20 rxns |
|---------------------------------------|---------|
| • Real Time Universal Mastermix (2X)* | 250 µl  |
| • PCR Grade Water**                   | 1000 µl |
| • MgCl <sub>2</sub> 25 mM **          | 500 µl  |

(\* ) Master mixes include HotStart Taq DNA Polymerase.

(\*\*) Optional

### PROCEDURE

#### FOR 1 RXN:

- 12,5 µl qPCR Reaction mix
- Primers (each forward and reverse primers 10 pmol) (\*)
- Probe 2,5 pmol (\*)
- DNA (100 – 150 ng) (\*)
- Add PCR Grade water until total volume 25 µl.
- Mix gently by pipetting.
- Run with the programme shown below.

(\*) Not included

### PCR PROGRAMME

|       |         |              |
|-------|---------|--------------|
| 95 °C | 3 min.  | 35-45 cycles |
| 95 °C | 15 sec. |              |
| 60 °C | 1 min.  |              |

### STORAGE

- All reagents should be stored at – 20 °C and dark.
- All reagents can be used until the expiration date on the box.
- Repeated thawing and freezing (>3X) should be avoided, as this may reduce the sensitivity of the assay.

### CAUTIONS

- All reagents should be stored at suitable conditions.
- Do not use the PCR mastermixes forgotten at room temperature.
- Thaw PCR mastermix at room temperature and slowly mix by inverting before use.
- Shelf-life of PCR mastermix is 12 months. Please check the manufacturing data before use
- Only use in vitro diagnostics.

Please contact us for your questions. [tech@snp.com.tr](mailto:tech@snp.com.tr)