

FGFR3monitor

(FGFR3m-RT50, FGFR3m-RT100)

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|-----------------------|--|
| Product Type | Real-Time PCR kit for FGFR3 hotspot mutations detection (includes mastermix) |
| Species | Human |
| Catalog number | FGFR3m-RT50, FGFR3m-RT100 |
| Batch number | See box and tubes |
| Shipping | Dry Ice |
| Storage | -20°C |

Storage and stability: This product is shipped in dry ice. Upon arrival FGFR3monitor reagents must be stored at -20°C and are stable for up to 2 years. Once opened, each reagent is stable to 5 freeze-thaws.

Expiry: The expiration date is printed on the box and on each tube label. This product will maintain its performance until that date. Its performance is not guaranteed after the expiration date.

Quality control: The quality of FGFR3monitor is tested on a lot-to-lot basis. Triplicate amplification of independent DNA's for each of the alterations ensures accuracy, specificity and efficiency of the batch.

Notes: For Life Science Research Use Only. Not For Use in Diagnostics Procedures.

Product description

The **FGFR3monitor** is a real-time PCR kit for the qualitative detection of four hotspot mutations in the FGFR3 gene: [R248C (c.742C>T), S249C (c.746C>G), G372C (c.1114G>T) and Y375C (c.1124A>G)]. It is validated for use with DNA samples derived from frozen/FFPE tumor tissues or urothelial tumor cells found in urine. FGFR3 mutations have been implicated in bladder cancer, cervical cancer, and multiple myeloma. The **FGFR3monitor** is indicated for use as an aid in identifying patients harbouring these mutations, particularly for stratifying patients for treatment with FGFR3 inhibitors and for monitoring those under surveillance for non-muscle invasive bladder cancer (NMIBC) recurrence. It is design to detect down to 1.56% of mutant sequences in a background of wild-type DNA. The **FGFR3monitor** includes a mastermix and 2 independent assays that use allele-specific primers in multiplex reactions (see table below). Each reaction contains primer/probes sets for mutations and internal control (IC) detection, as well as negative and positive DNA controls for sample validation and qualitative analysis.

| | Target | Reporter |
|---|---------------|----------|
| ● | FGFR3_248_Mut | FAM |
| | FGFR3_249_Mut | FAM |
| | FGFR3_IC | FAM |
| ● | FGFR3_372_Mut | FAM |
| | FGFR3_372_IC | HEX |
| | FGFR3_375_Mut | FAM |
| | FGFR3_375_IC | HEX |

Kit components

| Assay | Component | FGFR3m-RT50 | FGFR3m-RT100 |
|-------|----------------|-------------|--------------|
| ● | RFA-248/249 | 260 µL | 520 µL |
| | RFB-248/249 | 78 µL | 156 µL |
| | R1-248 | 34 µL | 68 µL |
| | R2-248 | 34 µL | 68 µL |
| | R1-249 | 34 µL | 68 µL |
| | R2-249 | 34 µL | 68 µL |
| | R1-IC | 34 µL | 68 µL |
| ● | R2-IC | 34 µL | 68 µL |
| | RFA-372 | 58 µL | 116 µL |
| | RFB-372 | 58 µL | 116 µL |
| | R1-372 | 26 µL | 52 µL |
| | R2-372 | 26 µL | 52 µL |
| | RFA-375 | 58 µL | 116 µL |
| | RFB-375 | 58 µL | 116 µL |
| | R1-375 | 26 µL | 52 µL |
| | R2-375 | 26 µL | 52 µL |
| ● | FGFR3_NC | 75 µL | 150 µL |
| | FGFR3_248/249+ | 30 µL | 60 µL |
| | FGFR3_372/375+ | 30 µL | 60 µL |
| ○ | Mastermix | 2x 1650 µL | 4x 1650 µL |
| | H2O | 2x 1000 µL | 4x 1000 µL |

Please, always follow the procedures described in the Instructions. Digital and printed versions of the instructions are provided with the product.

Handling requirements

- Allow reagent/controls to thaw on ice immediately before use. Keep them on ice while in use. All reagents and mixes must be prepared and stored protected from direct light.
- To prevent DNA/RNA contamination, use disposable plasticware. Automatic pipettes and non-disposable glassware or plasticware should be sterile/DNA/RNA free and should only be used for pre-amplification procedures. Gloves should be always worn, when handling/performing the full protocol.
- Change the tip when pipetting different components during reaction mixes preparation as well as when pipetting samples/controls into a different well.
- As with any test procedure, good laboratory practices are essential for the proper performance of this assay.

Safety precautions

The FGFR3monitor contains no substances which at their given concentration, are hazardous to health. FGFR3monitor Material Safety Data Sheet (MSDS) documentation is available for download at www.u-monitor.eu.

Technical support

For any technical enquiries, please contact our Technical Support team via email at lab@uromonitor.com.

User Guidelines

- The FGFR3monitor is a qualitative test. The test is not for quantitative measurements of percent mutation.
- The FGFR3monitor has been validated for use with 2.5-25 ng of DNA per replicate. DNA input amounts below 2.5 ng or above 25 ng per replicate are not recommended.