

## MERS 冠状病毒的核酸检测方法（引物与探针序列）

| 病毒检测方法                               | 目的靶基因             | 引物序列                                | 描述                                                                           | 参考文献 |
|--------------------------------------|-------------------|-------------------------------------|------------------------------------------------------------------------------|------|
| MERS-CoV                             |                   |                                     |                                                                              |      |
| Real-Time                            |                   |                                     |                                                                              |      |
| PCR                                  | upE               | 5'-GCAACGCGCGATTTCAGTT-3'           | 检测限<10 拷贝/反应, 线性动态范围 8 log unit, 1.3×10 <sup>-3</sup> TCID <sub>50</sub> /ml | [1]  |
|                                      |                   | 5'-GCCTCTACACGGGACCCATA-3'          |                                                                              |      |
|                                      |                   | FAM-CTCTTCACATAATCGCCCCGAGCTCG-BHQ1 |                                                                              |      |
|                                      | Nucleocapsid Gene | 5'-GGCACTGAGGACCCACGTT-3'           | 50% TCID <sub>50</sub> /ml                                                   | [1]  |
|                                      |                   | 5'-TTGCGACATACCCATAAAAAGCA-3'       |                                                                              |      |
|                                      | Nucleocapsid Gene | CCCCAAATGCTGAGCTTGCTCCTACA-BHQ1     | [1]                                                                          |      |
|                                      |                   | 5'-GGGTGTACCTCTTAATGCCAATTC-3'      |                                                                              |      |
|                                      | ORF1b             | 5'-TCTGTCTCTCCGCAAT-3'              | [2]                                                                          |      |
|                                      |                   | FAM -ACCCCTGCGCAAAATGCTGGG-BHQ1     |                                                                              |      |
|                                      | Orf1a             | 5'-TTCGATGTTGAGGGTGCTCAT-3'         | 检测限为 360 copies/ml                                                           | [3]  |
| 5'-TCACACCAGTTGAAAATCCTAATTG-3'      |                   |                                     |                                                                              |      |
| FAM-CCC GTAATGCATGTGGCACCAATGT-TAMRA |                   |                                     |                                                                              |      |
| 巢式 RT-PCR                            | RdRp Gene         | 5'-CAGTATGTGTAGTGCGCATATAAGCA-3'    | 可以用于冠状病毒的分型, 具有较高灵敏度。                                                        | [3]  |
|                                      |                   | FAM-TTGCAAATGGCTTGCCCCACT-TAMRA     |                                                                              |      |
|                                      |                   | 5'-TGCTATWAGTGCTAAGAATAGRGC-3'      |                                                                              |      |
|                                      | Nucleocapsid Gene | 5'-GCATWGCNCWGTACACTTAGG-3'         | 对 MERS-CoV 有较高的灵敏度和特异性。可用于病毒分型。                                              | [3]  |
|                                      |                   | 5'-TGCTATWAGTGCTAAGAATAGRGC-3'      |                                                                              |      |
|                                      |                   | 5'-CACTTAGRTARTCCCAWCCCA-3'         |                                                                              |      |
|                                      |                   | 5'-CCTTCGGTACAGTGGAGCCA-3'          |                                                                              |      |
|                                      |                   | 5'-GATGGGGTTGCCAAACACAAAC-3'        |                                                                              |      |
|                                      |                   | 5'-TGACCCAAAGAATCCCAACTAC-3'        |                                                                              |      |
|                                      |                   | 5'-GATGGGGTTGCCAAACACAAAC-3'        |                                                                              |      |

### 参考文献

- [1] Lu X, Whitaker B, Sakthivel SK, et al. Real-Time Reverse Transcription-PCR Assay Panel for Middle East Respiratory Syndrome Coronavirus[J]. J Clin Microbiol, 2014 , 52(1):67-75.
- [2] Corman V, Eckerle I, Bleicker T, et al. Detection of a novel human coronavirus by real-time reverse-transcription polymerase chain reaction[J]. Euro Surveill, 2012, 17(39):20285.
- [3] Corman VM, Müller MA, Costabel U et al. Assays for laboratory confirmation of novel human coronavirus (hCoV-EMC) infections[J]. Euro Surveill. 2012, 6,17(49).