



3D Med 思路迪

Leader In Precision Cancer Care

Diagnostics Data and Drug development

# 3D Med SARS-CoV-2 RT-qPCR LoD validation results by National Institutes for Food And Drug control

- **Samples and method for LoD validation:**

The known concentration of National Reference (Cultured virus in National Reference Panel for 2019-nCoV Nucleic Acids Detection Kit) was diluted to  $10^5$ copies/mL with Nuclease Free water.

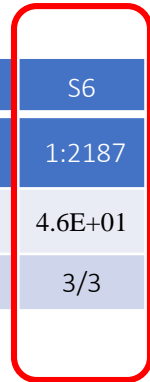
A serial dilution (S1-S10) of the stock solution of  $10^5$ copies/mL was built as follows. 3 replicates of each concentration were detected with our qRT-PCR kit.

- **Conclusion:**

Based on the results of **LoD validation**, the limit of detection for **ANDiS SARS-CoV-2 and Influenza A&B RT-qPCR Detection Kit** is **50 RNA copies/mL**

### Samples and Titer Used for LoD Study

Target	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
Dilution	1:9	1:27	1:81	1:243	1:729	1:2187	1:6561	1:19683	1:59049	1:177147
Concentration	1.1E+04	3.7E+03	1.2E+03	4.1E+02	1.4E+02	4.6E+01	1.5E+01	5.1E+00	1.7E+00	5.6E-01
Positive /Total	3/3	3/3	3/3	3/3	3/3	3/3	N	N	N	N



**Validation Report of National Institutes for Food And Drug control**  
中国食品药品检定研究院

## 检验报告

报告编号: RZ202004240

**Product Name:** ANDIS SARS-CoV-2 and Influenza A&B RT-qPCR Detection Kit  
**Manufacture:** 3D Biomedicine Science & Technology Co., Ltd

检品名称: 新型冠状病毒2019-nCoV和流感A/B核酸联合检测试剂盒(五色荧光PCR法)  
生产单位/产地: 上海思路迪生物医学科技有限公司

检验目的: 注册检验(国产体外诊断试剂/首次注册/质量标准复核)  
检验依据: 产品技术要求

中国食品药品检定研究院检验报告  
**Validation Report of National Institutes for Food And Drug control**

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Validation experiments	Specification	Results
二代甲/乙型流感病毒核酸检测试剂国家参考品	在试剂检测靶标范围内, 结果应与预期病原体类型/型别一致	PC01~PC03均为流感病毒B型阳性, 流感病毒A型阴性, 新型冠状病毒阴性; PC04~PC10均为流感病毒A型阳性, 流感病毒B型阴性, 新型冠状病毒阴性
2.3阴性参考品符合率	检测国家参考品, 不在试剂盒检测范围内的病原体均不应检出, 或检测企业阴性参考品N1~N8, 结果均为阴性	符合规定
新型冠状病毒核酸检测试剂国家参考品	N1~N14, N20~N22应均为阴性	均为新型冠状病毒和流感病毒A/B型阴性
	N15、N16、N18、N19应均为流感病毒A型阳性	均为新型冠状病毒阴性, 流感病毒A型阳性, 流感病毒B型阴性
	N17应为流感病毒B型阳性	均为新型冠状病毒阴性, 流感病毒B型阳性, 流感病毒A型阴性
二代甲/乙型流感病毒核酸检测试剂国家参考品	在试剂检测靶标范围内, 结果应与预期病原体类型/型别一致	N1~N10均为流感病毒A/B型和新型冠状病毒阴性

**Validate LoD with National SARS-CoV-2 Reference Standards**

S1-S3 positive, S4-S10 no requirement

S1-S6 SARS-CoV-2 positive; S7-S10 SARS-CoV-2 Negative

**National drug standard substance instruction manual**  
国家药品标准物质使用说明书

V1.0

**【特性量值】** 灵敏度参考品 S 浓度 (原液) 为  $3 \times 10^5$  copies/mL, 使用数字 PCR 方法联合定值。S 不可用于量值溯源。

3) 灵敏度参考品: S 使用无 RNA/DNA 酶去离子水进行 1:3 倍比稀释 (2 份水+1 份样本) 后, 将 1:9、1:27、1:81、1:243、1:729、1:2187、1:6561、1:19683、1:59049、1:177147 分别标记为 S1~S10, 按照试剂盒说明书要求进行核酸提取后进行检测;

The concentration of LoD Reference S is  $3 \times 10^5$  copies / mL. 3 times dilute S with nuclease free water first to make the stock solution. Then 1:9, 1:27, 1:81, 1:243, 1:729, 1:2187, 1:6561 and 1:19683 dilute the stock solution. Mark S1 to S9 with the diluted samples. Finally perform RT-qPCR detection with extracted RNA from S1-S9.