

TÜBİTAK UME

2019-nCoV Virus RNA Reference Material Production for RT-qPCR Measurements

RT-qPCR (Reverse Transcription Quantitative Polymerase Chain Reaction) method is one of the most efficient standard molecular diagnostic methods currently used for 2019-nCoV virus detection. On molecular based diagnostic systems, the analysis of 2019-nCoV virus starts with the reverse transcription (RT) of viral RNA to cDNA, and in the second step, cDNA is multiplied during qPCR when the most important step is the reverse transcription step and it should be strictly controlled. The objective of the project is the production of 2019-nCoV RNA reference material for use to control all steps of RT-qPCR. The RNA based Reference Material is highly demanded by testing laboratories and kit manufacturers for method validation, as well as for its use as an internal quality control material. In addition, 2019-nCoV RNA reference material will be used in proficiency testing schemes for external quality control purposes.