TRCReady[®] ensures Fully Automated and Fast High Quality Nucleic Acid Amplification Test





Easy and fast

- Fully automated sample purification, amplification and detection in 40 minutes
- 2 modules can be combined
- Automatic assesment of measurement results

Reliable

- Real time RNA detection
- Built-in internal amplification control
- Utilises ready and single use reagents and disposables

Secure

- Ready to use reagents and disposables
- Single and sealed reagent cup dedicated to each test
- Amplification and detection step in a closed tube avoiding contamination

 ${\rm «TRCR}{\rm »}$ and «TRCRapid» are the registered trademarks of Tosoh Corporation in EU, etc.



TOSOH EUROPE N.V.

Transportstraat 4 - 3980 Tessenderlo - BELGIUM Tel: +32 (0)13 66 88 30 - Fax: +32 (0)13 66 47 49 www.tosohbioscience.eu

TOSOH BIOSCIENCE LTD

The Business Centre - Edward Street, Redditch B97 6HA Worcestershire - UNITED KINGDOM Tel: +44 (0) 1527 592901 - Fax: +44 (0) 1527 592902 www.tosohbioscience.eu

TOSOH CORPORATION - BIOSCIENCE DIVISION

Shiba-Koen First Bldg. 3-8-2, Shiba, Minato-ku, Tokyo 105-8623 - JAPAN Tel: +81-3-5427-5181 - Fax: +81-3-5427-5220 www.tosoh.com



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TRCR® Technology

Combination of TRC reaction (Transcription Reverse transcription Concerted reaction) and INAF Probe (INtercalation Activating Fluorescence probe) achieves real time, one step, rapid and efficient detection of RNA.

In the TRC method, RNA is amplified isothermally. The INAF probe is a DNA oligonucleotide with which an intercalative fluorescence dye is linked, and of which the sequence is complementary to that of the target RNA.

TRC: Transcription Reverse transcription Concerted reaction



A. Trimming of the target RNA

A DNA oligonucleotide (Scissor Probe) binds a target RNA, and cuts the strand at the specific site using the RNaseH activity of the reverse transcriptase leading to the production of RNA with the same 5' end.

B. Reverse transcription

Double stranded DNA is synthesised by an anti-sense primer, a promoter primer and reverse transcriptase with DNA polymerase and RNaseH activities.

C. Transcription

RNA is synthesised through transcription by RNA polymerase.

D. Recycling of amplicons

The synthesised RNA has the same 5' end as the trimmed RNA and enters into the amplification cycle, leading to RNA synthesis in large quantities.

E. Real-Time detection

The INAF probe binds to the synthesised RNA and emits fluorescence.

TRCReady[®]-80 System Overview

Front Panel

Door

Reagent holder

P-cartridge holder





P-cartridge

REAGENTA





Place the P-cartridge on the P-cartridge holder and add the Reagents and TIP SET on the Reagent holder.



2. Place Holders in the instrument





Ready and single use reagents and disposables

TIP SET

3. Assay start

The purification, amplification The assay is automatically and detection processes of the nucleic acid are performed on the TRCReady[®]-80. The amplification of the target RNA is detected in real-time

by measurement of

the fluorescence intensity.



4. Report

performed and results objectively assessed.