

# Internal Positive RNA Control Assay 3

Order No.: RTGMIPCR3

Unit: 100 reactions

For research only, not for diagnostic use



**Description:** Internal Positive RNA Control Assay 3 is an internal positive control assay. It excludes false-negative interpretation of results caused by inhibition of RT real-time PCR and serves as a RNA extraction control. The assay is based on the amplification and detection (Cy5 channel) of an internal positive RNA control target that can be added during the extraction or to the mastermix. This assay can be performed in a multiplex-PCR with ingenetix ViroReal® assays detecting viral RNA, see information on the respective products. Internal Positive RNA Control Assay 3 can also be combined with user-specific assays.

**PCR-platforms:** Internal Positive RNA Control Assay 3 is developed for the ABI PRISM® 7500 (Fast) instrument (Life Technologies), the LightCycler® 480 instrument (Roche) and the Mx3005P® (Agilent) but can also be used with other real-time PCR instruments allowing detection in Cy5 channel.

**Content:** Internal Positive RNA Control Assay 3 contains the RNA IPC-3 Assay Mix (primers and probe) and the RNA IPC Target (internal control RNA target, synthetic RNA in an extra vial) for testing up to 100 samples. The amplification mix is not included. Store components at -20°C and protect from light.

**Use:** Please refer to the corresponding ViroReal® manuals for further instructions.

- **RNA IPC Target (orange cap):**

→ For monitoring of RT real-time PCR inhibition: Dilute RNA IPC Target freshly 1:500 with nuclease-free water and add to the master mix (use 1 µl/reaction).

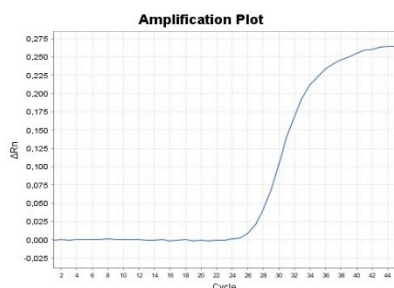
→ Alternatively, for control of RNA extraction and monitoring of RT PCR inhibition: Add the RNA IPC Target during extraction. Spike 1 µl of the undiluted RNA IPC Target into the sample material after the lysis buffer was added. Do not add the RNA IPC Target directly to the sample material.

Caution: The RNA IPC Target is stored in RNA stabilizer that contains guanidinium thiocyanate/Triton X-100. For MSDS, see [www.ingenetix.com](http://www.ingenetix.com).

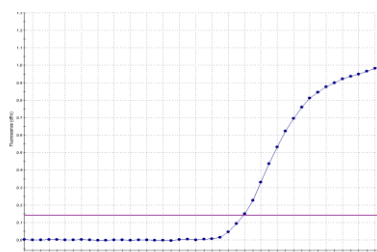
- **RNA IPC-3 Assay Mix (yellow cap):**

→ RT real-time PCR: Add 1 µl of RNA IPC-3 Assay Mix to 20 µl PCR reaction.

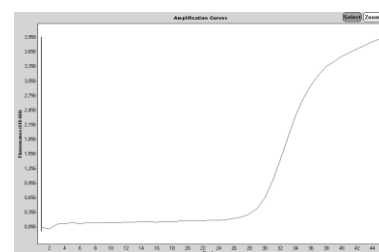
→ Temperature Profile: Annealing temperature: 60°C.



ABI Prism® 7500: Cy5 channel, 667 nm  
Detection of RNA IPC Target



Mx3005P®: CY5 channel  
Detection of RNA IPC Target



LightCycler® 480: Cy5 channel  
Detection of RNA IPC Target

## Overview of ingenetix real-time PCR control assays:

Information which control assay is suitable for your application can be found at the corresponding ingenetix BactoReal®, ViroReal® and ParoReal products.

Ingenetix real-time PCR control assays can also be combined with user-specific assays.

### 1. For monitoring of PCR inhibition:

ControlReal assays are based on the amplification and detection of an internal positive DNA control target included in the primer-probe mix.

Assay	Suitable for				Channel
	ABI PRISM® 7500	LightCycler® 1.2/1.5/2.0	LightCycler® 480	Mx3005P®	
ControlReal 1	✓			✓	VIC/HEX
ControlReal 2	(✓)	✓			NED (F2, 610 nm)
ControlReal 3	✓		✓	✓	Cy5

(✓) Not for use in combination with assays using TAMRA as quencher

### 2. For control of DNA extraction and monitoring of PCR inhibition:

Internal Positive Control Assays are based on the amplification and detection of an internal positive DNA control target added during extraction or to the mastermix. DNA target is provided in a separate vial.

Assay	Suitable for				Channel
	ABI PRISM® 7500	LightCycler® 1.2/1.5/2.0	LightCycler® 480	Mx3005P®	
Internal Positive Control Assay 1	✓			✓	VIC/HEX
Internal Positive Control Assay 2	(✓)	✓			NED (F2, 610 nm)
Internal Positive Control Assay 3	✓		✓	✓	Cy5

(✓) Not for use in combination with assays using TAMRA as quencher

### 3. For control of RNA extraction and monitoring of RT PCR inhibition:

Internal Positive RNA Control Assays are based on the amplification and detection of an internal positive RNA control target added during extraction or to the mastermix. RNA target is provided in a separate vial.

Assay	Suitable for				Channel
	ABI PRISM® 7500	LightCycler® 1.2/1.5/2.0	LightCycler® 480	Mx3005P®	
Internal Positive RNA Control Assay 1	✓			✓	VIC/HEX
Internal Positive RNA Control Assay 2	(✓)	✓			NED (F2, 610 nm)
Internal Positive RNA Control Assay 3	✓		✓	✓	Cy5

(✓) Not for use in combination with assays using TAMRA as quencher

For further information on our products please visit our homepage ([www.ingenetix.com](http://www.ingenetix.com))