

# Internal Positive Control Assay 1

Order No.: RTGMIPC-1

Unit: 100 reactions

For research only, not for diagnostic use



**Description:** Internal Positive Control Assay 1 is an internal positive control assay. It excludes false-negative interpretation of results caused by inhibition of real-time PCR and serves as an extraction control. The assay is based on the amplification and detection (VIC/HEX channel) of an internal positive DNA control target that can be added during the extraction or to the master mix. This assay can be performed in a multiplex-PCR with ingenetix BactoReal®, ViroReal® and ParoReal assays detecting bacterial, viral and parasitic DNA, see information on the respective products.

Internal Positive Control Assay 1 can also be combined with user-specific assays.

**PCR-platforms:** Internal Positive Control Assay 1 is developed for the ABI PRISM® 7500 (Fast) instrument (Life Technologies) and the Mx3005P® (Agilent) but can also be used with other real-time PCR instruments allowing detection in VIC/HEX channel.

**Content:** Internal Positive Control Assay 1 contains the IPC-1 Assay Mix (primers and probe) and the DNA IPC Target (internal control DNA target, approx. 60,000 copies/µl, 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 BactoReal®, ViroReal® and ParoReal manuals for further instructions.

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

- For monitoring of real-time PCR inhibition: DNA IPC Target is used directly as target for PCR. Dilute DNA IPC Target freshly 1:100 with water and add to the master mix (use 1 µl/reaction).

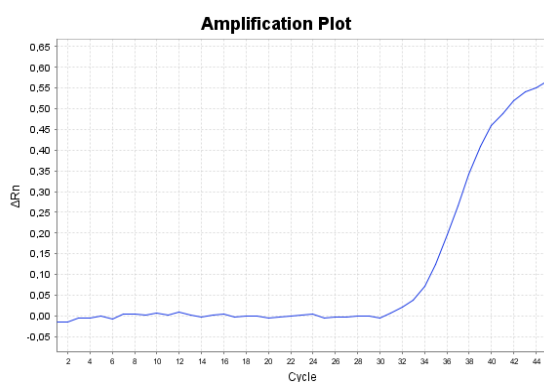
- Alternatively, for control of DNA extraction and monitoring of PCR inhibition: DNA IPC Target is added during extraction. Spike 1 µl of the undiluted DNA IPC Target into the sample material after the lysis buffer was added. Do not add the DNA IPC Target directly to the sample material.

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

- **IPC-1 Assay Mix (yellow cap):**

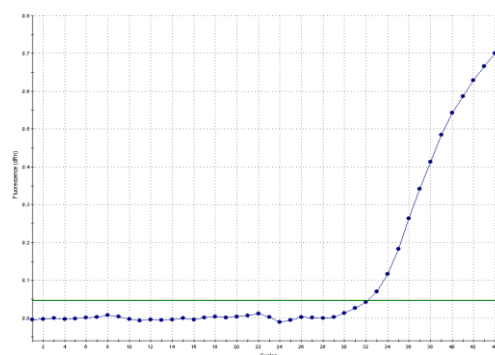
- Real-time PCR: Add 1 µl of IPC-1 Assay Mix to 20 µl PCR reaction.

- Temperature Profile: Annealing temperature: 60°C.



ABI Prism® 7500: VIC channel

Detection of internal positive control



Mx3005P®: HEX channel

Detection of internal positive control

## 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))