



Xeno Internal Positive Control (IPC)

A verification layer to help ensure that qPCR test results are accurate and actionable

Xeno IPC

Applied Biosystems™ VetMAX™ Xeno™ IPC serves as an internal positive control for the nucleic acid extraction process and/or monitors for the presence of qPCR inhibitors. It also serves as a positive control for qPCR. Xeno IPC is provided at a concentration of 10,000 copies/µL and available for RNA or DNA.

Xeno IPC assay

Applied Biosystems™ Xeno™ IPC assay is a primer/probe mix that detects the Xeno IPC. The resultant Xeno™ data is used to determine the validity of test results. Xeno IPC assay's novel synthetic design has been successfully benchmarked against millions of genomes, including those relevant to animal health. It is available in 25X concentration, with multiple dye options.

Benefits

- Easily integrated into any qPCR workflow
- Helps provide confidence that qPCR test results are accurate and actionable
- Helps reduce the likelihood of false negatives

Features

Flexible formats

Available as individual IPCs and assays, Xeno IPCs provide labs with a flexible portfolio of solutions:

- RNA or DNA IPCs
- Applied Biosystems™ VIC™ and LIZ™ dye channel formats
- High- and low-throughput kit options

Proven quality

- Recommended in the American Association of Veterinary Laboratory Diagnosticians (AAVLD) guidelines
- Xeno IPC is a component used in our USDA-licensed Applied Biosystems™ VetMAX™-Gold kits and VetMAX™-Plus kits
- Xeno IPC assay has been used in many of our Applied Biosystems™ VetMAX™ reagents

Compatible reagents

Xeno IPC is compatible with a variety of qPCR workflow reagents:

- Applied Biosystems™ MagMAX™ kits, and other magnetic-bead based or spin column sample preparation kits
- VetMAX™ reagents or laboratory-prepared assays
- Applied Biosystems™ AgPath-ID™, Path-ID™, and VetMAX™ Plus reagents, or other commercial reagents

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Qualified results

Using Xeno IPC effectively monitors for qPCR inhibition, which means that you can easily qualify your testing results. Its novel synthetic design prevents the assay from producing false signals from nonspecific targets. Figure 1 shows how Xeno IPC identifies the presence of a qPCR inhibitor (hematin) at multiple concentrations. Since the expected range of C_t values in a normal reaction (without inhibition) with Xeno IPC is known, you can determine the effect the inhibition has on the reaction, thereby lowering the risk of false-negative results.

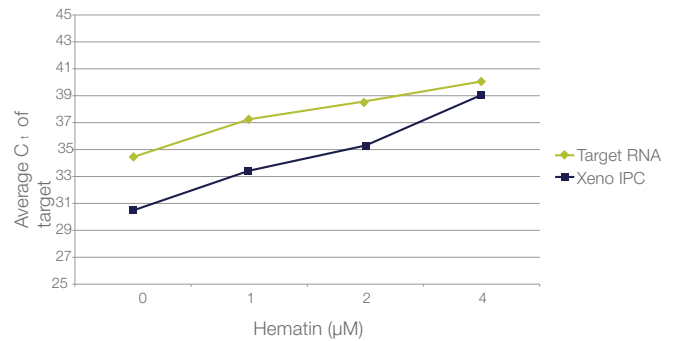
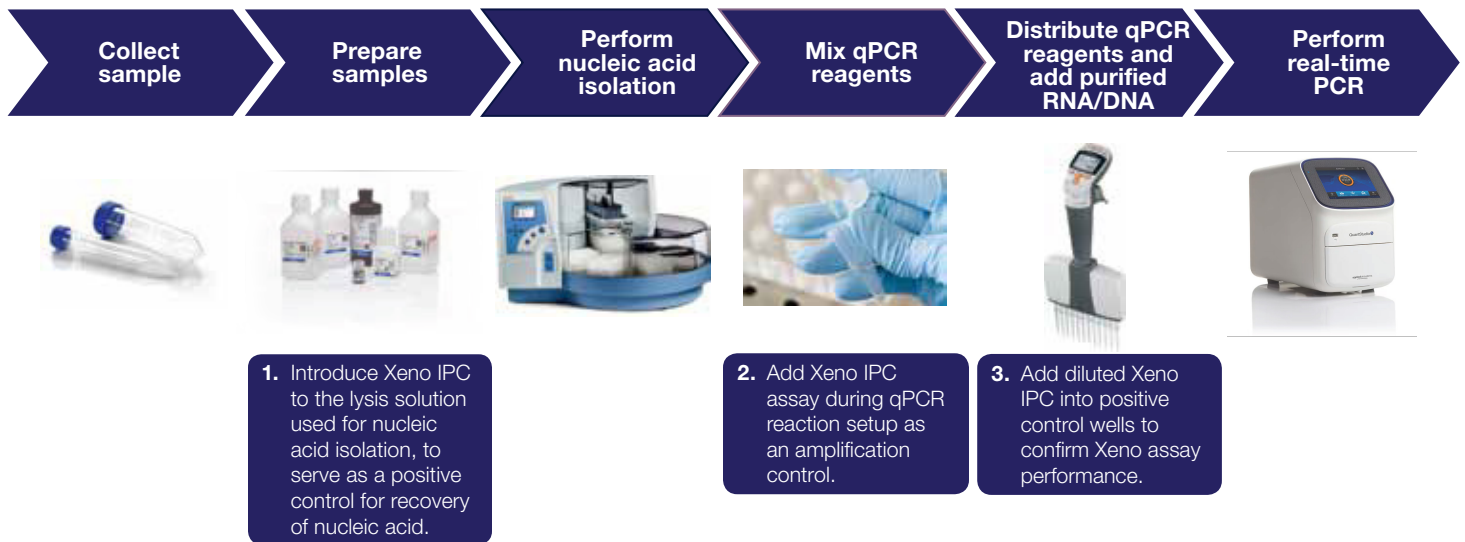


Figure 1. Graph depicting the effect of increasing inhibition on RNA target and subsequent effect on Xeno IPC. One hundred copies per reaction of RNA target and 1,000 copies per reaction of Xeno IPC were exposed to increasing levels of hematin (0–4 µM). The data show that Xeno IPC follows the target's trend of increasing C_t values due to inhibition and therefore can be used as an indicator of inhibition in the reaction. Reactions were carried out on the Applied Biosystems™ 7500 Real-Time PCR System, run in standard mode.

Xeno IPC workflow



Ordering information

Product	Quantity	Cat. No.
VetMAX Xeno Internal Positive Control RNA	100 reactions	A29763
VetMAX Xeno Internal Positive Control DNA	100 reactions	A29764
VetMAX Xeno Internal Positive Control—VIC Assay	100 reactions	A29765
VetMAX Xeno Internal Positive Control—LIZ Assay	100 reactions	A29766
VetMAX Xeno Internal Positive Control RNA	500 reactions	A29761
VetMAX Xeno Internal Positive Control DNA	500 reactions	A29762
VetMAX Xeno Internal Positive Control—VIC Assay	500 reactions	A29767
VetMAX Xeno Internal Positive Control—LIZ Assay	500 reactions	A29768

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