

BactoReal® Kit *Enterococcus* spp.



For research only, not for diagnostic use

BactoReal® Kit *Enterococcus* spp.

Order no.	Reactions	Pathogen	Internal positive control
DVEB03413	100	FAM channel	Cy5 channel
DVEB03453	50	FAM channel	Cy5 channel
DVEB03411	100	FAM channel	VIC/HEX channel
DVEB03451	50	FAM channel	VIC/HEX channel

Kit contents:

- Detection assay for *Enterococcus* species
- Detection assay for internal positive control (control of amplification)
- DNA reaction mix (contains uracil-N glycosylase, UNG)
- Positive control for *Enterococcus*
- Water



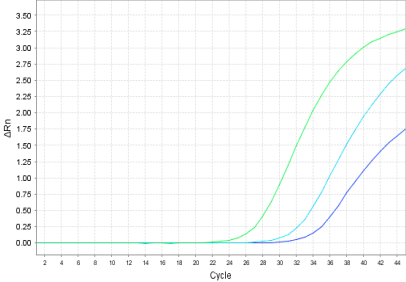
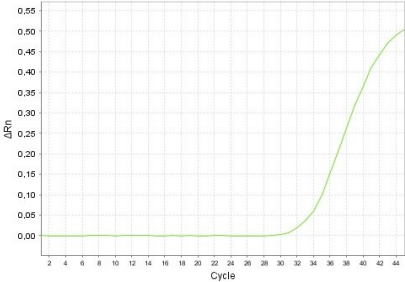
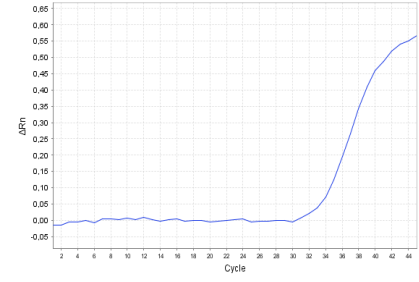
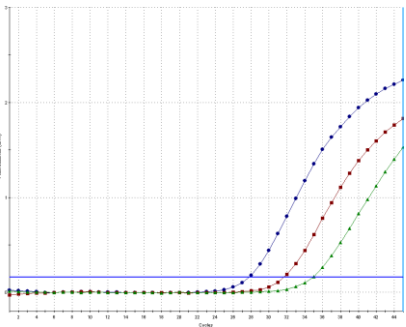
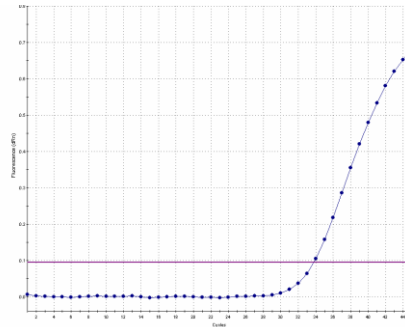
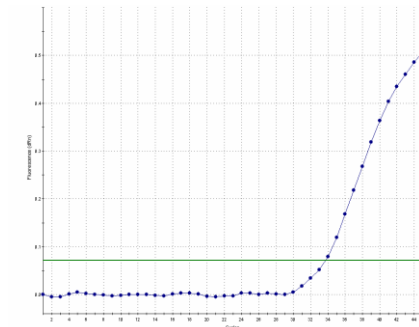
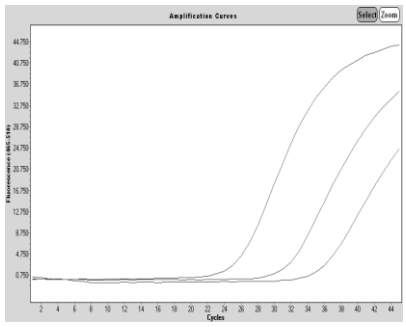
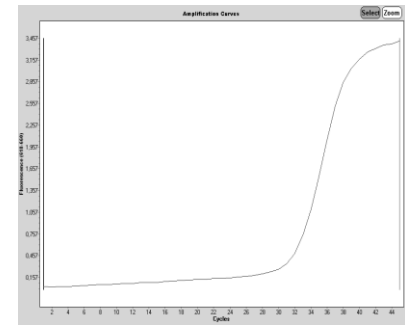
Background: The genus *Enterococcus* includes more than 17 species, until 1984 *Enterococcus* species were classified as Group D *Streptococcus*. This genus belongs to lactic acid bacteria of the phylum *Firmicutes*. Enterococci are Gram-positive cocci, they are facultative anaerobic organisms that can survive and grow in many environments. They are part of the normal intestinal flora of humans and animals but have also been found in soil, water, plants and insects. Enterococci are important pathogens responsible for serious infections. In cattle, enterococci have been associated with diarrhea in calves and bovine mastitis in dairy cattle.

Description: BactoReal® Kit *Enterococcus* spp. is based on the amplification and detection of the 23S rRNA gene of species of the genus *Enterococcus* using real-time PCR. It allows the rapid and sensitive detection of the 23S rRNA gene of *Enterococcus* spp. from DNA samples purified from biopsies, blood, swabs, milk, etc. (e.g. with the QIAamp DNA Mini Kit).

PCR-platforms: BactoReal® Kit *Enterococcus* spp. is developed and validated for the ABI PRISM® 7500 instrument (Life Technologies), LightCycler® 480 (Roche) and Mx3005P® QPCR System (Agilent), but is also suitable for other real-time PCR instruments.

Sensitivity and specificity: BactoReal® Kit *Enterococcus* spp. has an analytical sensitivity of 10 copies/reaction. High concentrations of some non-*Enterococcus* species might lead to weak cross reaction.

References: Katie Fisher, K. and Phillips, C. 2009. The ecology, epidemiology and virulence of *Enterococcus*. *Microbiology* 155: 1749-1757.

Detection of <i>Enterococcus</i> spp.	Detection of internal positive control CR-3	Detection of internal positive control CR-1
<p style="text-align: center;">Amplification Plot</p> 	<p style="text-align: center;">Amplification Plot</p> 	<p style="text-align: center;">Amplification Plot</p> 
<p>ABI Prism® 7500: FAM channel, 530 nm 1:10 serial dilution of <i>Enterococcus</i> DNA</p>	<p>ABI Prism® 7500: Cy5 channel, 667 nm Internal positive control</p>	<p>ABI Prism® 7500: VIC channel, 554 nm Internal positive control</p>
		
<p>Mx3005P®: FAM channel 1:10 serial dilution of <i>Enterococcus</i> DNA</p>	<p>Mx3005P®: CY5 channel Internal positive control</p>	<p>Mx3005P®: HEX channel Internal positive control</p>
<p style="text-align: center;">Amplification Curve</p> 	<p style="text-align: center;">Amplification Curve</p> 	
<p>LightCycler® 480: FAM channel 1:10 serial dilution of <i>Enterococcus</i> DNA</p>	<p>LightCycler® 480: Cy5 channel Internal positive control</p>	

BactoReal®, MycoReal, ParoReal and ViroReal® Kits run with the same thermal cycling conditions. RNA and DNA material can be analysed in one PCR run.

For further information on our products please visit our homepage (www.ingenetix.com)