BactoReal® Kit *Streptococcus* spp.

For research only, not for diagnostic use

BactoReal® Kit *Streptococcus* spp.			
Order no.	**Reactions**	**Pathogen**	**Internal positive control**
DVEB03813	100	FAM channel	Cy5 channel
DVEB03853	50	FAM channel	Cy5 channel
DVEB03811	100	FAM channel	VIC/HEX channel
DVEB03851	50	FAM channel	VIC/HEX channel

Kit content:

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

Background: *Streptococcus* is a genus of Gram-positive bacteria belonging to the *Firmicutes* and the lactic acid bacteria group. There are currently over 50 species known in this genus. Many streptococcal species are nonpathogenic and form part of the commensal animal or human microbiome of the mouth, skin, intestine, and upper respiratory tract. Certain *Streptococcus* species are responsible for streptococcal pharyngitis, pink eye, meningitis, bacterial pneumonia, endocarditis, erysipelas, necrotizing fasciitis and bovine mastitis.

Description: BactoReal® Kit *Streptococcus* spp. is based on the amplification and detection of the 23S rRNA gene of species of the genus *Streptococcus* using real-time PCR. It allows the rapid and sensitive detection of the 23S rRNA gene of *Streptococcus* spp. from DNA samples purified from biopsies, blood, swabs, milk, etc. Extraction is recommended with InstaGene Matrix (Bio-Rad) or with QIAamp Viral RNA Mini Kit (Qiagen) to avoid contamination with streptococci.

PCR-platforms: BactoReal® Kit *Streptococcus* 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 *Streptococcus* spp. has an analytical sensitivity of 50-100 copies per PCR, as in negative samples the presence of contaminating streptococcal DNA in the extraction or amplification reagents results in weak positive amplification. High concentrations of some non-*Streptococcus* species might lead to weak cross reaction.

References: Wyder AB, Boss R, Naskova J, Kaufmann T, Steiner A, Graber HU. 2011. Streptococcus spp. and related bacteria: their identification and their pathogenic potential for chronic mastitis - a molecular approach. Res Vet Sci. 91:349-57.

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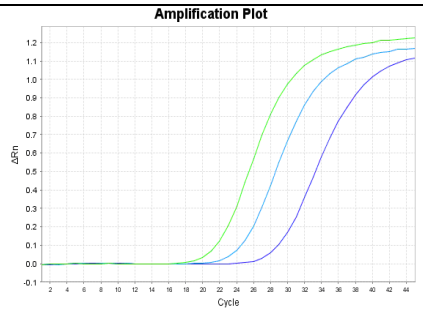
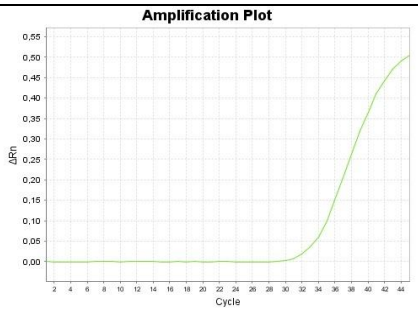
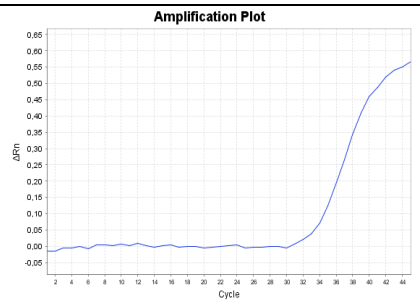
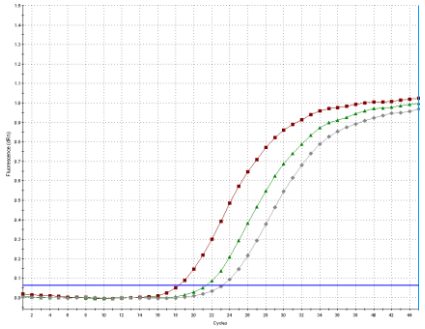
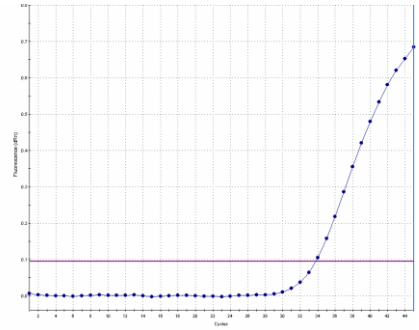
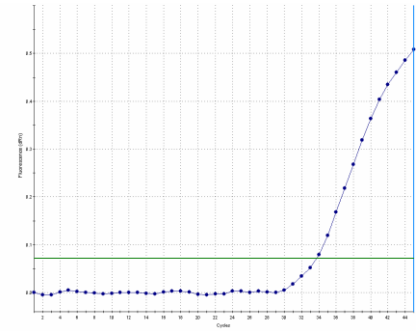
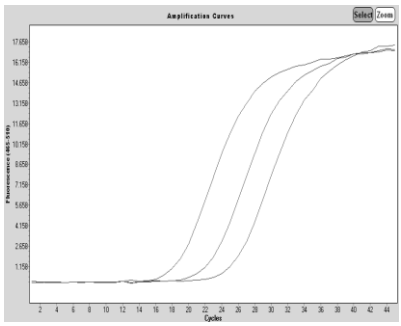
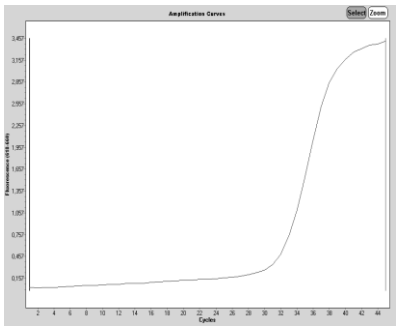
Detection of ***Streptococcus* spp.**	Detection of internal positive control **CR-3**	Detection of internal positive control **CR-1**
		
ABI Prism® 7500: FAM channel, 530 nm 1:10 serial dilution of *Streptococcus* DNA	**ABI Prism® 7500:** Cy5 channel, 667 nm Internal positive control	**ABI Prism® 7500:** VIC channel, 554 nm Internal positive control
		
Mx3005P®: FAM channel 1:10 serial dilution of *Streptococcus* DNA	**Mx3005P®:** CY5 channel Internal positive control	**Mx3005P®:** HEX channel Internal positive control
		
LightCycler® 480: FAM channel 1:10 serial dilution of *Streptococcus* DNA	**LightCycler® 480:** Cy5 channel Internal positive control	

Ingenetix ViroReal®, BactoReal® and ParoReal 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)

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