

BactoReal® Kit *Staphylococcus* spp.



For research only, not for diagnostic use

BactoReal® Kit *Staphylococcus* spp.

Order no.	Reactions	Pathogen	Internal positive control
DVEB03713	100	FAM channel	Cy5 channel
DVEB03753	50	FAM channel	Cy5 channel
DVEB03711	100	FAM channel	VIC/HEX channel
DVEB03751	50	FAM channel	VIC/HEX channel

Kit contents:

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

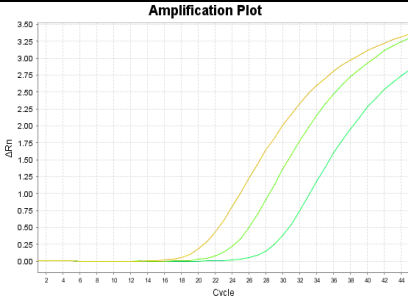
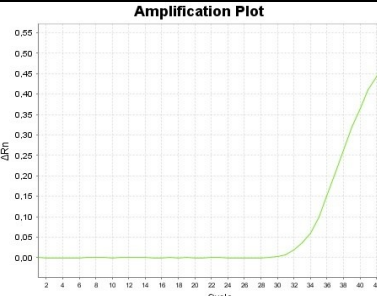
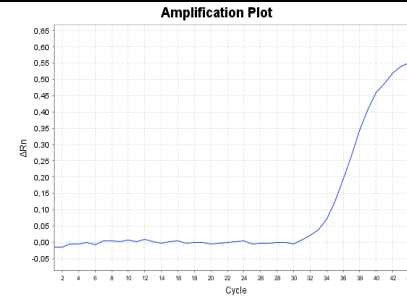
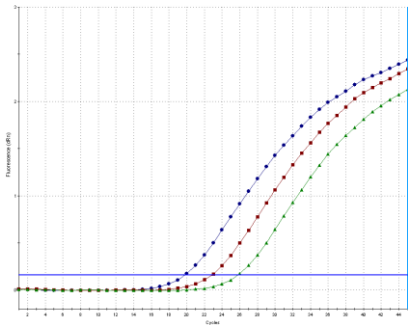
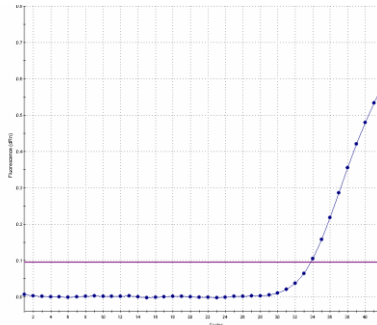
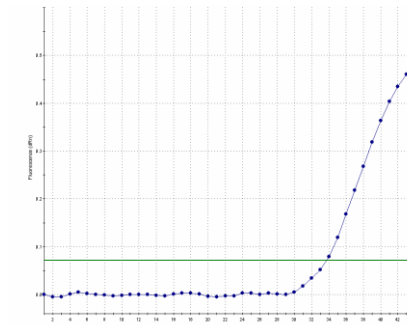
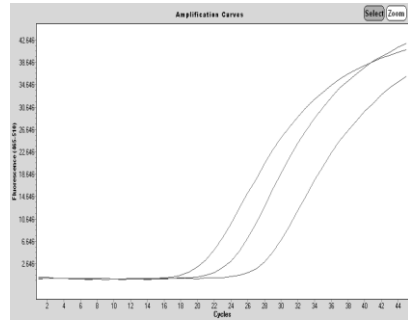
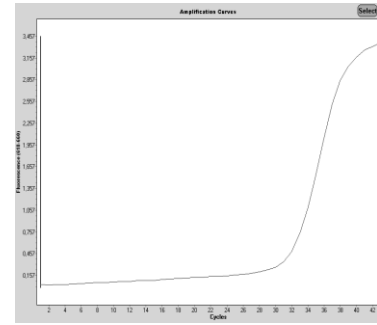


Background: The genus *Staphylococcus* includes more than 50 different species. Staphylococci are commensals on skin and upper respiratory tracts of mammals and birds. However, they can also cause various infections of the skin and a wide variety of diseases in humans and animals through either toxin production or penetration. Foreign bodies, such as sutures, indwelling catheters, and implanted joints, are extremely susceptible to *Staphylococcus epidermidis* colonization, and often serve as the point of entry for infection. Another common path of infection is the respiratory tract, where the bacterium causes pneumonia. Other diseases caused by staphylococci include boils, sinusitis, emesis, diarrhea, endocarditis, scalded skin syndrome, osteomyelitis, urinary tract infection, toxic shock syndrome and food poisoning. Staphylococci, mainly *Staphylococcus aureus* can also cause bovine mastitis.

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

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

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