

# BactoReal® Kit *Mannheimia haemolytica*



For veterinary use only

## BactoReal® Kit *Mannheimia haemolytica*

Order no.	Reactions	Pathogen	Internal positive control
DVEB02913	100	FAM channel	Cy5 channel
DVEB02953	50	FAM channel	Cy5 channel
DVEB02911	100	FAM channel	VIC/HEX channel
DVEB02951	50	FAM channel	VIC/HEX channel

### Kit contents:

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



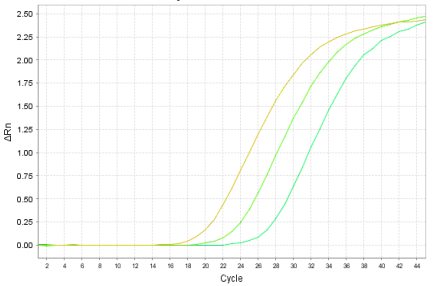
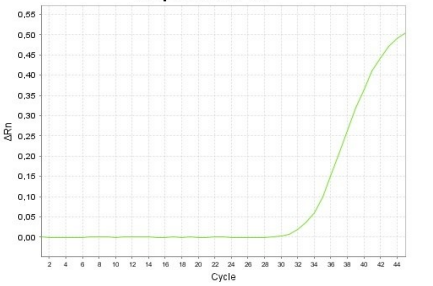
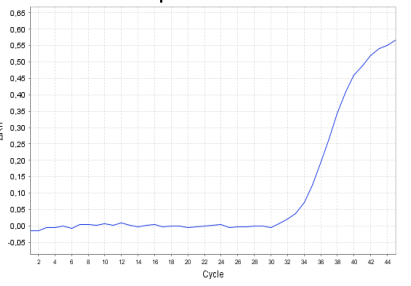
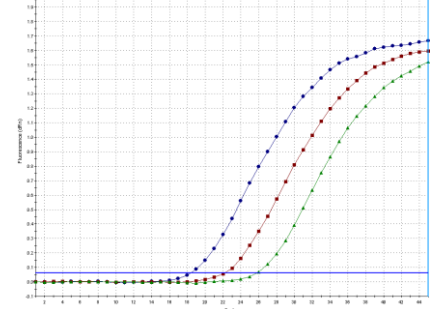
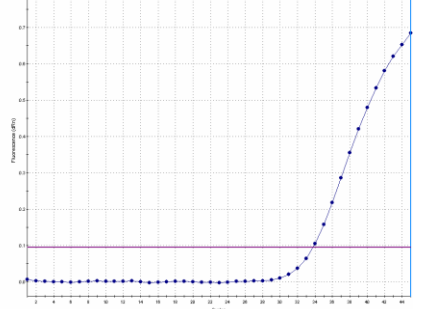
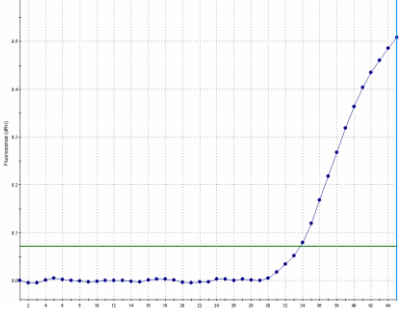
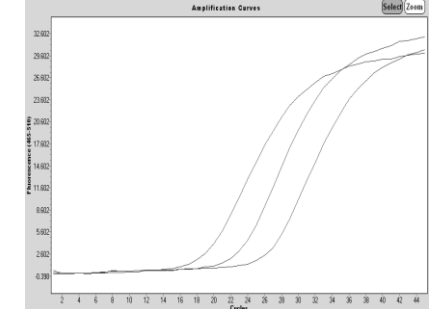
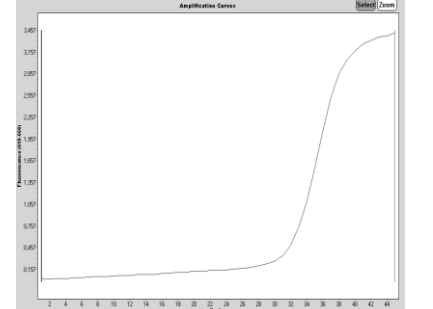
**Background:** *Mannheimia haemolytica* (formerly *Pasteurella haemolytica*) is an opportunistic pathogen of cattle, sheep and other ruminants. It causes epizootic pneumonia in cattle known as shipping fever, transit fever or pneumonic pasteurellosis. *Mannheimia haemolytica* is considered as part of the normal bacterial flora found in the upper respiratory tract of most cattle but is not considered as normal flora of the lungs. It gains access to the lungs when host defenses are compromised by stress or infection with respiratory viruses or mycoplasma.

**Description:** BactoReal® Kit *Mannheimia haemolytica* is based on the amplification and detection of the 16S rDNA gene of *M. haemolytica* using real-time PCR. It allows the rapid and sensitive detection of the 16S rDNA gene of *M. haemolytica* from DNA samples purified from tracheal swabs, washes or from lung tissue or associated lymph nodes (e.g. with the QIAamp DNA Mini Kit).

**PCR-platforms:** BactoReal® Kit *Mannheimia haemolytica* 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 *Mannheimia haemolytica* has an analytical sensitivity of 3 copies per PCR. Specificity was tested on a *Pasteurella multocida* isolate. No cross-reaction was observed.

**References:** Rice JA, Carrasco-Medina L, Hodgins DC, Shewen PE. 2007. *Mannheimia haemolytica* and bovine respiratory disease. Anim Health Res Rev. 8:117-28.

<p>Detection of <b><i>Mannheimia haemolytica</i></b></p>	<p>Detection of internal positive control <b>CR-3</b></p>	<p>Detection of internal positive control <b>CR-1</b></p>
<p><b>Amplification Plot</b></p>  <p><b>ABI Prism® 7500:</b> FAM channel, 530 nm 1:10 serial dilution of <i>Mannheimia haemolytica</i> DNA</p>	<p><b>Amplification Plot</b></p>  <p><b>ABI Prism® 7500:</b> Cy5 channel, 667 nm Internal positive control</p>	<p><b>Amplification Plot</b></p>  <p><b>ABI Prism® 7500:</b> VIC channel, 554 nm Internal positive control</p>
<p><b>Mx3005P®:</b> FAM channel 1:10 serial dilution of <i>Mannheimia haemolytica</i> DNA</p> 	<p><b>Mx3005P®:</b> CY5 channel Internal positive control</p> 	<p><b>Mx3005P®:</b> HEX channel Internal positive control</p> 
<p><b>LightCycler® 480:</b> FAM channel 1:10 serial dilution of <i>Mannheimia haemolytica</i> DNA</p> 	<p><b>LightCycler® 480:</b> 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](http://www.ingenetix.com))