

BactoReal® Kit *Brucella* spp.



For veterinary use only

BactoReal® Kit *Brucella* spp.

Order no.	Reactions	Pathogen	Internal positive control
DVEB02113	100	FAM channel	Cy5 channel
DVEB02153	50	FAM channel	Cy5 channel
DVEB02111	100	FAM channel	VIC/HEX channel
DVEB02151	50	FAM channel	VIC/HEX channel

Kit content:

- Detection assay for *Brucella* spp.
- Detection assay for internal positive control (control of amplification)
- DNA reaction mix (contains uracil-N glycosylase, UNG)
- Positive control for *Brucella abortus*
- Water



Background: Brucellosis - also called Bang's disease, Crimean fever, Gibraltar fever, Malta fever, Maltese fever, Mediterranean fever, rock fever, or undulant fever - is a zoonotic infection of domesticated and wild animals, caused by bacteria of the genus *Brucella*. Humans become infected by ingestion of food products of animal origin (such as undercooked meat or unpasteurized milk or dairy products), direct contact with infected animals, or inhalation of infectious aerosols. Transmission from human to human is rare but possible. Species infecting domestic livestock are *B. melitensis* (goats and sheep), *B. suis* (pigs), *B. abortus* (cattle and bison), *B. ovis* (sheep) and *B. canis* (dogs).

Description: BactoReal® Kit *Brucella* spp. is based on the amplification and detection of the IS711 region of *B. abortus*, *B. ovis*, *B. melitensis*, *B. suis* and *B. canis* using real-time PCR. It allows the rapid and sensitive detection of the IS711 region of *Brucella* spp. from DNA samples purified from blood, bone marrow and biopsies (e.g. with the QIAamp DNA Mini Kit).

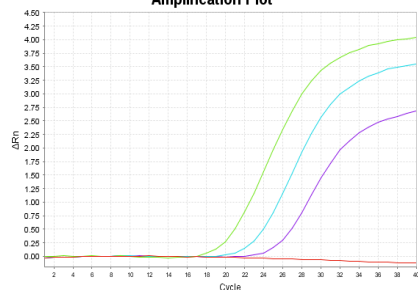
PCR-platforms: BactoReal® Kit *Brucella* spp. is developed and validated for the ABI PRISM® 7500 instrument (Life Technologies), LightCycler® 480 (Roche) and Mx3005P® QPCR System (Agilent), but is also suitable for other real-time PCR instruments.

Sensitivity and specificity: BactoReal® Kit *Brucella* spp. has a sensitivity of 5 copy numbers per PCR and is specific for *B. abortus*, *B. ovis*, *B. melitensis*, *B. suis* and *B. canis*.

References: Christopher S, Umapathy BL, Ravikumar KL. 2010. Brucellosis: review on the recent trends in pathogenicity and laboratory diagnosis. J Lab Physicians 2:55-60.

Detection of *Brucella*

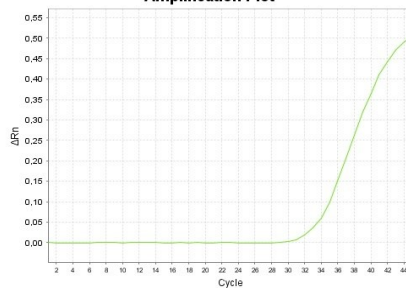
Amplification Plot



ABI Prism® 7500: FAM channel, 530 nm
1:10 serial dilution of *Brucella abortus* DNA

Detection of internal positive control CR-3

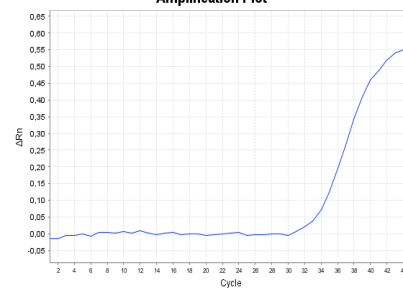
Amplification Plot



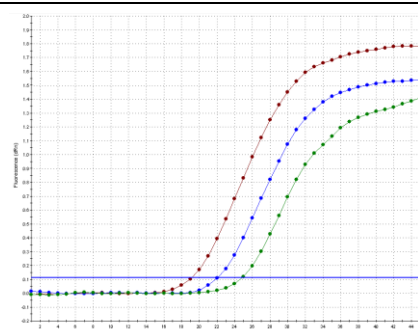
ABI Prism® 7500: Cy5 channel, 667 nm
Internal positive control

Detection of internal positive control CR-1

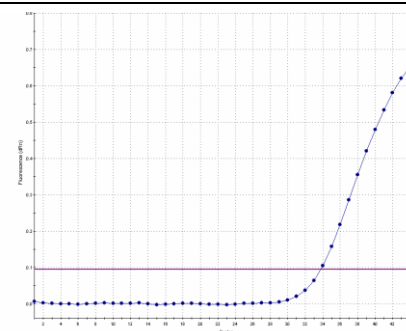
Amplification Plot



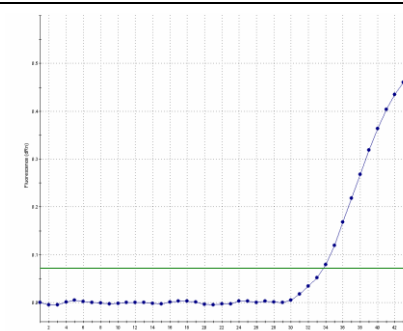
ABI Prism® 7500: VIC channel, 554 nm
Internal positive control



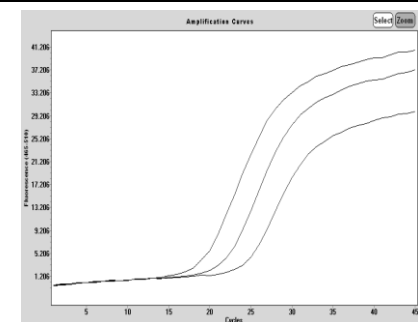
Mx3005P®: FAM channel
1:10 serial dilution of *Brucella abortus* DNA



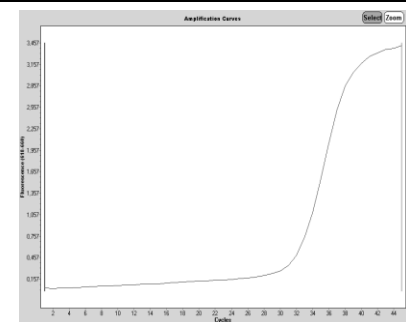
Mx3005P®: CY5 channel
Internal positive control



Mx3005P®: HEX channel
Internal positive control



LightCycler® 480: FAM channel
1:10 serial dilution of *Brucella abortus* DNA



LightCycler® 480: Cy5 channel
Internal positive control

Ingenetix ViroReal®, BactoReal®, MycoReal 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)