

# ParoReal Kit

## *Echinococcus multilocularis*



For veterinary use only

### ParoReal Kit *Echinococcus multilocularis*

Order no.	Reactions	Pathogen	Internal positive control
DVEP00113	100	FAM channel	Cy5 channel
DVEP00153	50	FAM channel	Cy5 channel
DVEP00111	100	FAM channel	VIC/HEX channel
DVEP00151	50	FAM channel	VIC/HEX channel

#### Kit contents:

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



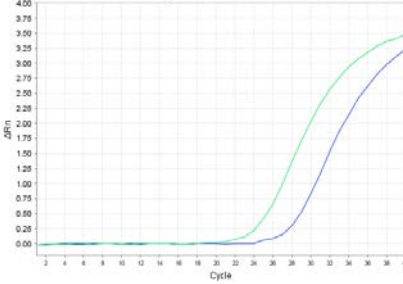
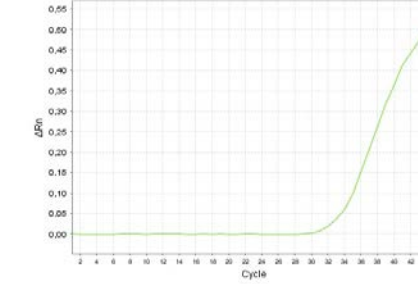
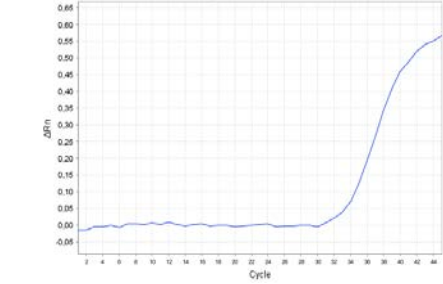
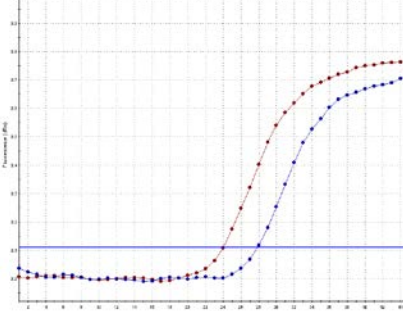
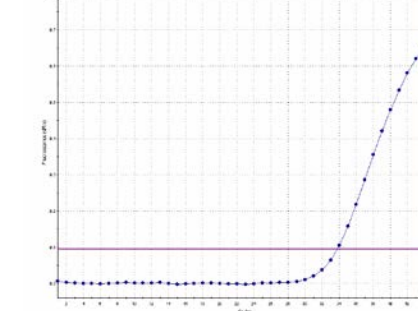
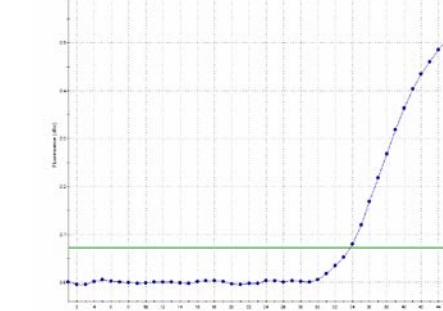
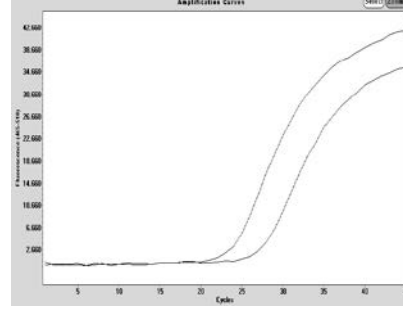
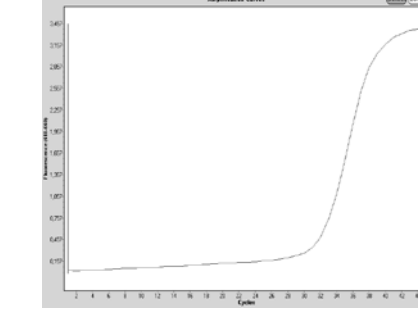
**Background:** *Echinococcus multilocularis* is a cyclophyllid tapeworm causing echinococcosis, a disease that affects many canid species including wolves, coyotes, foxes, jackals and domesticated dogs. Humans can also contract this disease. *Echinococcus multilocularis* requires two types of hosts to mature properly. It is transmitted to intermediate hosts via the ingestion of eggs in infected food. The eggs travel to the lungs, liver, and other internal organs where they develop into multilocular cysts. Finally, *Echinococcus multilocularis* is transmitted to definitive hosts by means of eating infected, cyst-containing organs. There it becomes attached to the tissues and grows.

**Description:** ParoReal Kit *Echinococcus multilocularis* is based on the amplification and detection of the mitochondrial ND1 gene of *E. multilocularis* using real-time PCR. It allows the rapid and sensitive detection of DNA of *E. multilocularis* from samples purified from biopsies (e.g. with the QIAamp DNA Mini Kit) or from feces (e.g. with the QIAamp DNA Stool Mini Kit).

**PCR-platforms:** ParoReal Kit *Echinococcus multilocularis* is developed and validated for the ABI PRISM® 7500 instrument (Thermo Fisher Scientific), LightCycler® 480 (Roche) and Mx3005P® QPCR System (Agilent), but is also suitable for other real-time PCR instruments.

**Sensitivity and specificity:** ParoReal Kit *Echinococcus multilocularis* has an analytical sensitivity of 5 target copies per PCR.

**References:** Stieger C., Heggin D., Schwarzenbach G., Mathis A., and Deplazes P. 2002. Spatial and temporal aspects of urban transmission of *Echinococcus multilocularis*. *Parasitology*, 124:631–640.

Detection of <i>Echinococcus multilocularis</i>	Detection of internal positive control CR-3	Detection of internal positive control CR-1
<p><b>Amplification Plot</b></p>  <p><b>ABI Prism® 7500:</b> FAM channel, 530 nm 1:10 serial dilution of <i>E. multilocularis</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®: FAM channel</b> 1:10 serial dilution of <i>E. multilocularis</i> DNA</p> 	<p><b>Mx3005P®: CY5 channel</b> Internal positive control</p> 	<p><b>Mx3005P®: HEX channel</b> Internal positive control</p> 
<p><b>LightCycler® 480: FAM channel</b> 1:10 serial dilution of <i>E. multilocularis</i> DNA</p> 	<p><b>LightCycler® 480: Cy5 channel</b> Internal positive control</p> 	

**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](http://www.ingenetix.com))**