

# BactoReal® Kit *Escherichia coli*



For veterinary use only

## BactoReal® Kit *Escherichia coli*

Order no.	Reactions	Pathogen	Internal positive control
DVEB01913	100	FAM channel	Cy5 channel
DVEB01953	50	FAM channel	Cy5 channel
DVEB01911	100	FAM channel	VIC/HEX channel
DVEB01951	50	FAM channel	VIC/HEX channel

### Kit contents:

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



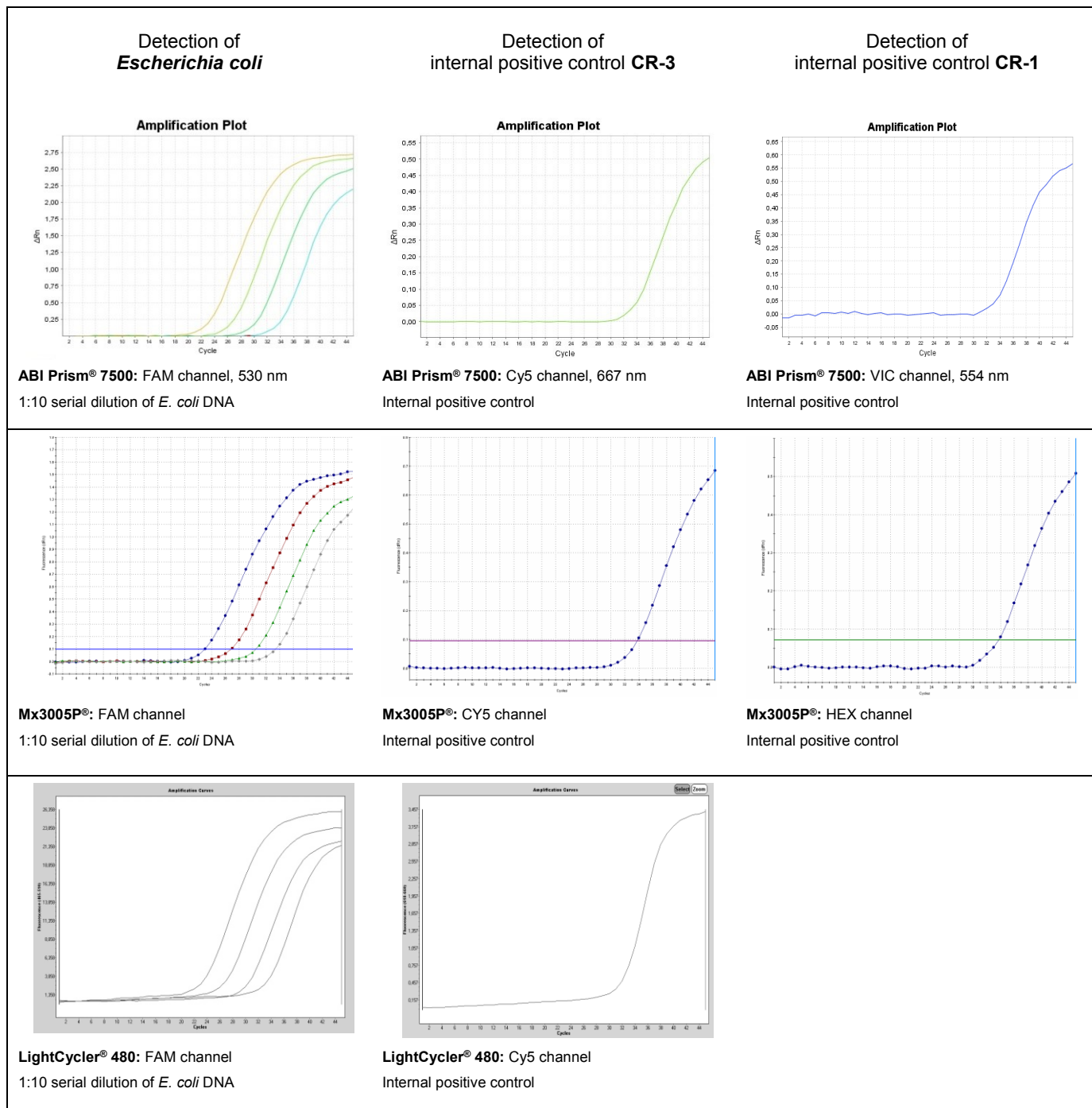
**Background:** *Escherichia coli* is a gram negative bacterium that is a member of the normal gut flora of humans and animals. Most *E. coli* strains are harmless, but some serotypes carry virulence factors which enable them to be pathogenic in target hosts. These pathogenic *E. coli* are implicated in a number of diseases including diarrhoea, septicaemia and urinary tract infections in humans and animals. The *dxs* gene (1-deoxyxylulose-5-phosphate synthase gene) can be found in *E. coli* and *Shigella* strains.

**Description:** BactoReal® Kit *Escherichia coli* is based on the amplification and detection of the *dxs* gene of *E. coli* and *Shigella* using real-time PCR. It allows the rapid and sensitive detection of the *dxs* gene of *Escherichia coli* purified from sample material (e.g. with the QIAamp DNA Mini Kit).

**PCR-platforms:** BactoReal® Kit *Escherichia coli* 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 *Escherichia coli* has a detection limit of 1000 copies/reaction, since Ct/Cp values >35 result from amplification of low concentrations of *E. coli* DNA present in the DNA reaction mix. The kit shows cross reaction with *Shigella*.

**References:** Lois LM, Campos N, Putra SR, Danielsen K, Rohmer M, Boronat A. 1998. Cloning and characterization of a gene from *Escherichia coli* encoding a transketolase-like enzyme that catalyzes the synthesis of D-1-deoxyxylulose 5-phosphate, a common precursor for isoprenoid, thiamin, and pyridoxol biosynthesis. Proc Natl Acad Sci U S A. 95:2105-10.



**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))**