WizDia-Q™ Animal ID qPCR Kit (Horse)

Real-time PCR detection of Horse DNA in food and feed sample

REF WQ0213
RUO Research Use Only
Σ 100

Description

WizDia-Q™ Animal ID qPCR Kit (Horse) is provides a range of testing options for the real-time detection of Horse species to ensure compliance with regulations on the labeling of foods and composition of animal feeds.

Kit Storage and Stability

WizDia-Q™ Animal ID qPCR Kit should be stored at - 20ºC, under this condition, the kit is stable until expiration date stated on the label

Kit Contents

Component	Volume	Cap color	Storage
qPCR Reaction Mix	500 µl x 2 vial	Natural	- 20ºC
Horse Detection Mix	250 µl x 2 vial	Yellow	- 20ºC
Positive Control	100 µl x 1 vial	Red	- 20ºC
PCR grade water	1,000 µl x 1 vial	Green	- 20ºC

Reagent and Equipment to be supplied by the user

- Real-Time PCR Instrument
- DNA extraction kit
- Pipettes
- Sterile pipette tips
- Vortex mixer
- Centrifuge
- Disposable gloves

Protocol

Please read through the entire protocol before starting.

1. DNA Preparation

Please carry out the DNA isolation according to the manufacturer's instructions. The following standard extraction kit is recommended.

- WizPrep™ gDNA Mini Kit (Cell/Tissue), Cat No. W71060

2. DNA Amplification

1) Prepare appropriate PCR tubes and label. Additional PCR tubes for positive control (P.C) & negative control (N.C)

Contents	Sample	P. C	N. C
qPCR Mix	10 µl	10 µl	10 µl
Horse Detection Mix	5 µl	5 µl	5 µl
DNA Template	2 µl	-	-
Positive Control	-	2 µl	-
Distilled Water	3 µl	3 µl	5 µl
Total	20 µl	20 µl	20 µl

2) Dissolve the mix by pipetting. Note :The pellet is easily dissolved, by letting the mixture stand at R.T. for 1-2minutes after adding water.
3) (Optional) Add mineral oil. This step is unnecessary when using a thermal cycler that employs a top heating method (general methods).
4) Perform PCR reaction as following process

Step	Temp.	Time	Cycle
Initial Denaturation	95ºC	5 min.	1
Denaturation	95ºC	10 sec.	40
Annealing/detection (Data collection)	55ºC	30 sec.	

3. Data Analysis and Interpretation

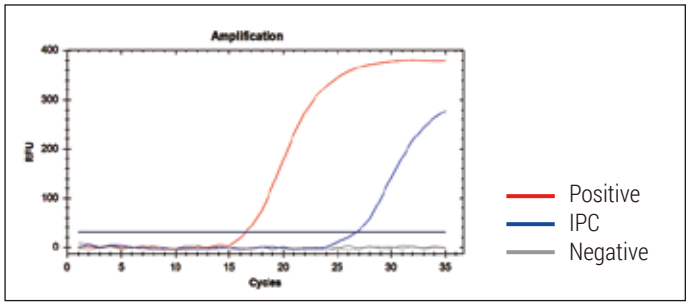
The following results are possible:

1) A signal is detected in channel FAM. The result is positive: The sample contains Porcine DNA. In this case, the detection of a signal in channel Cy5 (Internal Positive Control ;IPC) is dispensable, as high initial concentrations of Porcine DNA. can lead to a reduced or absent fluorescence signal of the IPC (competition).
2) In channel FAM no signal is detected, At the same time, a Cy5 signal from the IPC appears. The sample does not contain any Porcine DNA. It can be considered negative. In the case of a negative Porcine PCR the detected signal of the IPC rules out the possibility of PCR inhibition.
3) Neither in channel FAM nor in channel Cy5 is a signal detected. A diagnostic statement can not be made. Inhibition of the PCR reaction.

Target	FAM	Cy5	Interpretation
Positive Control	+	+	Positive/Valid
Nagative Control	-	+	Negative/Valid
Sample	+	+	Positive/Valid
Sample	+	-	Positive/Valid
Sample	- (> Ct*)	- (> Ct*)	Invalid
Sample	-	-	Invalid

* For Ct values, see Important product information bulletin

- If the result is positive in both Cy5 and FAM channels, the result is valid, Porcine DNA is detected.
- If the result is negative in the FAM channel and the result in the Cy5 channel is positive, the result is valid, Porcine DNA is not detected.
- If the result is negative or > Ct (for different thermocyclers) in both Cy5 and FAM channels, the result is invalid. It is necessary to repeat amplification. If the result is the same, repeat DNA extraction. If the result is the same again, it is considered to be invalid. In this case, it is recommended to repeat material sampling.
- If the result is > Ct in the FAM channel and the result in the Cy5 channel is positive, the result is invalid. It is necessary to repeat amplification. If the result is the same, repeat DNA extraction. If the result is the same again, it is considered to be equivocal. In this case, it is recommended to repeat material sampling.



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Caution

- For research purpose only. For in Vitro Use Only.
- Do not use any reagent after the expiration date.
- Do not use together with reagents of other products.
- Follow the instructions.
- Always wear gloves and a mask when handling biohazardous agents.
- DO NOT repeatedly freeze/thaw Kit components.
- Always use sterile, filtered pipette tips.
- All positive controls should be added in a physically separate location from where the premix is reconstituted.
- Briefly vortex and spin-down all Kit components after thawing to ensure optimum results.
- Take care in handling of specimen to minimize risk of infection.
- All procedure should be carried out on ice.

Trouble Shooting Guide

- In the case of difficult to interpret results due to non-specific amplification.
  ☞ Reduce amount of template by 1/10 dilution and reacts again.
- Preparation of PCR reaction at room temperature may cause the non-specific amplification.

Ordering Information

Product	Cat No.	Size
WizDia-Q™ Animal ID qPCR Kit (Bovine)	WQ1211	100 rxn
WizDia-Q™ Animal ID qPCR Kit (Chicken)	WQ1212	100 rxn
WizDia-Q™ Animal ID qPCR Kit (Horse)	WQ1213	100 rxn
WizDia-Q™ Animal ID qPCR Kit (Porcine)	WQ1214	100 rxn
WizDia-Q™ Animal ID qPCR Kit (Sheep)	WQ1215	100 rxn
WizPrep™ gDNA Mini Kit (Cell/Tissue)	W71060-100	100 prep

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