



qPCR PLRV / PVY set and kit

qPCR set and kit for the detection of potato leafroll virus (PLRV) and potato virus Y (PVY)

- Triplex qPCR (PLRV, PVY & internal control in one reaction)
- Fast and reliable protocol
- Increased test security due to lot to lot consistency
- Developed and validated in cooperation with Agroscope
- Cost effective
- Time saving
- Kit includes potato DNA/RNA rapid extraction set

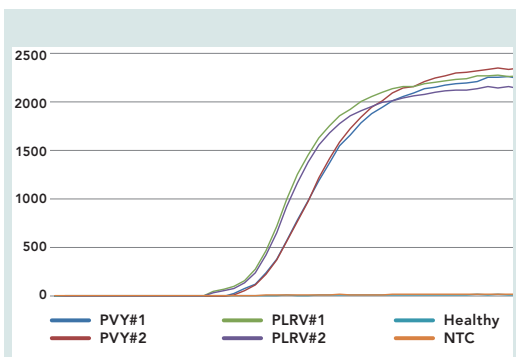


Figure 1

Graph shows typical amplification curves from PVY-positive and PLRV-positive samples compared with a healthy sample showing no amplification.

When costs and time are precious

Assay design	Laboratory made solution (day)	Bioreba qPCR set (day)
Define primers	2	–
Evaluate suppliers of PCR enzymes	1	–
Develop and optimize procedure	10	–
Assay validation	> 30	–
Verify lot-to-lot consistency	1	–
Shelf life / stability tests	> 30	–
Total working days	> 74	–

➡ You safe at least 74 working days!

The qPCR set enables the simultaneous detection (multiplex) of potato virus Y (PVY; all strains) and potato leafroll virus (PLRV) with real time PCR. Viral RNAs extracted from potato samples are amplified in a one-step RT-PCR reaction. The amplification of the cDNAs can be monitored in real time since the specific probes are labeled with fluorophores (PVY: Fam and PLRV: Cy5). For the convenience of the operator an internal control is included (IC: JOE). The control shows whether both the reverse transcription and the amplification of the RNA worked as intended.

Suitable tissues for the source of viral RNA are potato leaves and tubers (peel, stolon, sprouts). It is highly recommended to use the BIOREBA "Potato DNA/RNA rapid extraction" (included in the qPCR kits) for the extraction of RNA. The extraction method with Potato DNA/RNA Rapid Extraction set has been validated. The method has been approved for seed potato certification. The qPCR for the detection of PLRV, PVY and IC was developed and validated in two certification seasons (2014/15) in collaboration with Agroscope, the Swiss centre of excellence for research in the agriculture and food sector.

There are two set sizes available for 96 and for 192 samples and there are four kit sizes available for pools of 10 or up to 25 potato samples and for 96 or 192 extractions respectively.

Ordering Information

qPCR PLRV/PVY sets

Part No.	Description	No. of reactions
839600	qPCR PLRV/PVY set 96 includes: <ul style="list-style-type: none"> • Taq Master Mix • RT Master Mix • Primers/Probes/IC Mix_PLRV/PVY • Nuclease free water 	96
839200	qPCR PLRV/PVY set 192 includes: <ul style="list-style-type: none"> • Taq Master Mix • RT Master Mix • Primers/Probes/IC Mix_PLRV/PVY • Nuclease free water 	192

qPCR PLRV/PVY kits

Part No.	Description	No. of reactions	Amount of samples (potatoes)
839610	qPCR PLRV/PVY kit 96/10 includes: <ul style="list-style-type: none"> • qPCR PLRV/PVY set 96 • Potato DNA/RNA rapid extraction set 10x for 96 extractions and a pool of 10 potatoes 	96	10
839625	qPCR PLRV/PVY kit 96/25 includes: <ul style="list-style-type: none"> • qPCR PLRV/PVY set 96 • Potato DNA/RNA rapid extraction set 25x for 96 extractions and a pool of 25 potatoes 	96	25
839210	qPCR PLRV/PVY kit 192/10 includes: <ul style="list-style-type: none"> • qPCR PLRV/PVY set 192 • Potato DNA/RNA rapid extraction set 10x for 192 extractions and a pool of 10 potatoes 	192	10
839225	qPCR PLRV/PVY kit 192/25 includes: <ul style="list-style-type: none"> • qPCR PLRV/PVY set 192 • Potato DNA/RNA rapid extraction set 25x for 192 extractions and a pool of 25 potatoes 	192	25



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