

## Product Information: DAS-ELISA

# Potato virus V (PVV)

### Synonym: Potyvirus vetuberosi

PVV (3) is found in the Andean region of South America and in Western Europe. Most cultivars of potato react hypersensitively to inoculation developing local necrotic spots and severe systemic necrosis, and are rarely found infected in the field. In the majority of the small number of cultivars in which natural infection is often found, the virus occurs virtually symptomlessly or induces little more than leaf pallor, some decrease in leaflet size and slight leaflet distortion. However, a few of these cultivars develop mosaic and necrotic spotting of lower leaves. Natural infection has been detected only in potato.

### Specificity and sampling instruction

The PVV reagent based on polyclonal antibodies, was made against PVYC 624 (2). The virus was first categorized as a deviating strain of PVY, but in 1986, it was renamed as the separate virus PVV (3). There is no serological cross-reaction in DAS-ELISA between PVV and PVY.

For all potato reagents, we recommend our extraction buffer «General» (Art. No. 110120) for testing leaf samples at a ratio of 1:20 (w/v). For testing sprouted tuber samples (sprouts of potato), a special extraction buffer «Bulbs & Tubers» (Art. No. 110122), containing egg albumin (ovalbumin), is used at a ratio of 1:10 to 1:20 (w/v; 1,2).

This product has been developed in cooperation with Agroscope, the Swiss centre of excellence for research in the agriculture and food sector.

### Information on the antibodies

Coating IgG: polyclonal; conjugate: polyclonal

### References

- (1) Gugerli, P. 1986. In H.U. Bergmeyer: Methods of Enz. Analysis. Vol. XI. pp. 430-446.
- (2) Gugerli, P., and Fries, P. 1983. Characterization of monoclonal antibodies to potato virus Y and their use for virus detection. J. gen. Virol. 64:2471-2477
- (3) Jones, R.A.C., and Fribourg, C.E. 1986. Potato virus V. Descriptions of plant viruses No. 316. CMI/AAB. 4 pp.

### Ordering Information

**BIOREBA offers the following formats:**

**Individual ELISA reagents** for 100, 500 or 1000 assays: IgG and/or conjugate for the working volume of 200 µl/test/well.

**Reagent sets** for 480 or 960 assays: IgG and conjugate, positive and negative controls, and microtiter plates (F-96) for a working volume of 200 µl/test/well.

**Complete kits** for 96, 480 or 960 assays: All reagents, controls, microtiter plates (F-96), buffers, and substrate necessary for a working volume of 200 µl/test/well.

ELISA buffers, equipment for sample preparation and disposables are also available.

For all Art. No. please refer to our product catalogue or our homepage [www.bioreba.com](http://www.bioreba.com) and for prices and further information on any other product from BIOREBA, please contact your local distributor or our office in Switzerland.

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Adaptations from last version: added revised taxonomy of ICTV and assays of individual ELISA reagents.