

Product Information: DAS-ELISA

Prune dwarf virus (PDV)

Synonym: Ilarvirus PDV

PDV (6) occurs world-wide. It is transmitted by grafting, by seed and by pollen. PDV causes considerable damage in many *Prunus* hosts. There are no known vectors for PDV. The major symptoms are: Dwarfing (narrow, leathery leaves) in prune; yellows in sour cherry, especially when *Prunus necrotic ringspot virus* (PNRSV) is also present; and chlorotic ringspot, small etched necrotic spots, or yellow mosaic in sweet cherry.

Specificity and sampling instruction

These DAS-ELISA reagents (1) contain polyclonal antibodies made against a recombinant coat protein of PDV (6) as well as antibodies made against the purified virus, PDV isolate 8/1 from plum (3). The reagents do not distinguish between isolates from different *Prunus* host species. Generally, the virus can be readily detected in fruit trees throughout the whole year, in leaves, flowers, dormant buds or bark of young shoots (4), but the uneven distribution of the virus within trees has to be taken into consideration for sample collection (2). Samples are homogenized 1:20 (w/v) in extraction buffer «General» (Art. No. 110120).

The product was developed in cooperation with the Martin-Luther-University Halle-Wittenberg, Halle (Saale), Germany.

Information on the antibodies

Coating IgG: polyclonal; conjugate: polyclonal

References

- (1) Clark, M.F., and Adams, A.N. 1977. J. gen. Virol. 34:475-483.
- (2) Gilmer, R.M., and Brase, K.D. 1963. Phytopathology 53:819-821.
- (3) Grüntzig, M. and Fuchs, E. 1988. Zentralbl. Mikrobiol. 143:25-37. VEB Gustav Fischer Verlag Jena.
- (4) Fuchs, E. Grüntzig, M., and Al Kai, B. 1988. Nachrichtenblatt für den Pflanzenschutz in der DDR. Heft 10 pp. 208-211.
- (5) Fulton, R.W. 1970. Descriptions of plant viruses. No. 19. CMI/AAB. 3 pp.
- (6) Tasselli, L. 2019. Rekombinante Herstellung des Prune Dwarf Virus Hüllproteins in *Spodoptera frugiperda* und *Escherichia coli*, Bachelorarbeit ZHAW, unveröffentlicht.

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 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.