

Product Information: DAS-ELISA

Papaya ringspot virus (PRSV)

Synonym: Potyvirus papayanuli

PRSV (2) is transmissible mechanically, and by numerous species of aphids in a non-persistent manner. Most strains belong to one of two major types, which are serologically very closely related. Type P (papaya-infecting) isolates cause an important disease in papaya and also occur in cucurbits. Type W (= watermelon mosaic virus 1) isolates cause important diseases in watermelon and other cucurbits, but do not infect papaya. The virus is widely distributed throughout the world. In papaya, type P isolates cause mottling and distortion of leaves, rings and spots on fruit, and streaks on stems and petioles. Plants are stunted and fruit set is reduced.

Specificity and sampling instruction

These reagents were made against the isolate PRSV HA 5-1 (3,4) and specifically react in DAS-ELISA (1) with PRSV in different host plants from different geographic regions (broad-spectrum reagent). The best sampling time, for example for papaya and cucurbits, is during the active growing season. Symptomatic leaves are the best tissue source for testing. Samples are homogenised 1:20 (w/v) in extraction buffer «General» (Art. No. 110120).

The product was developed in cooperation with Cornell University, New York State Agricultural Experiment Station, Geneva, NY, USA.

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) Purcifull, D., Edwardson, J., Hiebert, E., and Gonsalves, D. 1984. Descriptions of plant viruses. No. 292. CMI/AAB. 8 pp.
- (3) Yeh, S.D. 1984. Thesis. Cornell University, 98 pp.
- (4) Yeh, S. D., Gonsalves, D. and Provvidenti, R. 1984. Phytopathology 74: 1081-1085.

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.