

Product Information: DAS-ELISA

Watermelon mosaic virus 2 (WMV-2)

Synonym: Potyvirus citrulli

WMV-2 (4) is readily mechanically transmissible and by many species of aphids in a non-persistent manner. WMV-2 has a moderately wide host range. It causes diseases of various cucurbits, and is found in several leguminous and malvaceous species. WMV-2 is widely distributed throughout the world and causes mosaic and mottle diseases of cantaloupe, cucumber, pumpkin, squash and watermelon. It reduces fruit production and quality in squash and other cucurbits and it causes mottle diseases of pea. It naturally occurs in various leguminous, malvaceous, and chenopodiaceous weeds, ornamentals and crop plants.

Specificity and sampling instruction

The antibodies were made against a Swiss isolate of WMV-2 from zucchini (3) and a US isolate from Florida (2), and react with WMV-2 in DAS-ELISA (1). The best sampling season for testing cucurbits is when plants are actively growing. Detection in cucumber leaves is not straightforward since a certain level of "background reaction" with healthy tissue is observed (which is not the case with melon, squash, watermelon or zucchini). Samples are homogenised 1:20 (w/v) in extraction buffer «General» (Art. No. 110120).

The product was developed in cooperation with Agroscope, the Swiss centre of excellence for research in the agriculture and food sector; and the 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) Fuchs, M., Tricoli, D.M., Carney, K.J., Schesser, M., McFerson, J.R., and Gonsalves, D. 1998. Plant Dis. 82:1350-1356.
- (3) Gugerli, P. 1993. Annual report - Swiss Fed. Agric. Res. Stat. of Changins 1992-1993, pp. 96.
- (4) Purcifull, D., Hiebert, E., Edwardson, J. 1984. Descriptions of plant viruses. No. 293. CMI/AAB. 7pp.

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.