

Product Information: DAS-ELISA

Apple mosaic virus (ApMV)

Synonym: Ilarvirus ApMV

Apple mosaic virus (ApMV, Ilarvirus) (3) has a wide natural host range. It infects many woody plants such as, e.g. apple, plum, almond, apricot, hop, hazelnut, birch, horse chestnut, raspberry, rose (and other species in the family Rosaceae) etc. The distribution is world-wide. Transmission via root grafts (e.g. in nurseries) is possible. ApMV causes mosaic, mottling and necrotic ringspots, often similar to those caused by Prunus necrotic ringspot virus.

Specificity and sampling instructions

The DAS-ELISA reagents (1) were made against a hop isolate of ApMV (E. Fuchs, personal communication) and recognize isolates of ApMV in a wide range of host plants, e.g. in apple, plum, hop, hazelnut, horse chestnut etc. The concentration of ApMV in woody plants varies during the year. The highest virus concentration is usually found in forced buds (leaf and flower buds) or in naturally grown petals as well as in young leaves (2, 4). Best results are obtained with a 1:20 (w/v) plant tissue extraction with extraction buffer "General" (Art. No. 110120). The virus is very labile in plant extracts; thus, plant extracts need to be processed in ELISA immediately after preparation (homogenization).

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) Fuchs, E., Grüntzig, M., and Al Kai, B. 1988. Nachrichtenblatt für den Pflanzenschutz in der DDR. Heft 10. pp. 208-211.
- (3) Fulton, R.W. 1972. Descriptions of plant viruses. No. 83. CMI/AAB. 4pp.
- (4) Grüntzig, M, and Fuchs, E. 1988. Zentralbl. Mikrobiol. 143:25-37.

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.



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