

Product Information: DAS-ELISA

Tomato yellow leaf curl virus (TYLCV)

Synonym: Begomovirus coheni

TYLCV (1) infects several plant species but causes substantial economic damage mainly in tomatoes. The virus is established in the Mediterranean area, in Africa, Asia, and more recently, has reached the Western Hemisphere (2). TYLCV moves only in its vector *Bemisia tabaci*, which can spread it between fields (and presumably glasshouses) in infested areas. TYLCV is listed as an A2 quarantine pest by EPPO (www.eppo.org).

Specificity and sampling instruction

The coating reagent contains polyclonal antibodies; the conjugate consists of monoclonal antibodies, developed against a TYLCV isolate from Jemen (S. Winter, *personal communication*). This «broad-spectrum» reagent combination detects all isolates of TYLCV but also other begomoviruses such as tomato mottle virus (ToMoV), bean golden mosaic virus (BGMV), squash leaf curl virus (SLCV), and African cassava mosaic virus (ACMV). For increased test security, several samples of young leaves from different parts of the plant should be taken and extracted at 1:20 (w/v) in extraction buffer «General» (Art. No. 110120). The product is based on antibodies developed by the Leibniz Institute DSMZ GmbH, Braunschweig, Germany.

Information on the antibodies

Coating IgG: polyclonal; conjugate: monoclonal

References

- (1) Brunt, A.A., and Cohen, S. 1996. In Viruses of Plants. Descriptions and Lists from the VIDE Database, pp. 1319- 1321.
- (2) Polston, J.E., and Anderson, P.K. 2007. Plant Disease 81:1358-1369.

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.