

Product Information: DAS-ELISA

Tospovirus broad-spectrum (Tospo I,II,III)

Members of the genus *Tospovirus* (3, 5) cause significant yield losses in a large number of economically important crops e.g. groundnut, lettuce, papaya, pea, potato, sweet pepper, tobacco, tomato and in many ornamental crops. This broad-spectrum reagent detects all serogroups within the genus *Tospovirus* (Tab. 1).

Tab. 1. Viruses in the genus *Tospovirus* are classified as follows:

Species	Serogroup*	Serotype
TSWV	Tomato spotted wilt virus I Synonyms: BR-01, CNPH ₁ , TSWV-L3	
TCSV	Tomato chlorotic spot virus II Synonym: BR-03	Type I
GRSV	Groundnut ringspot virus II Synonyms: TSWV-peanut, SA-05	Type II
INSV	Impatiens necrotic spot virus III Synonyms: TSWV-I, NL-07	

* A separate monitoring of different species is often desirable. In this case, tests would have to be done with the two reagents TSWV and INSV (see specific product information).

Specificity and sampling instruction

These reagents contain complementary polyclonal and monoclonal antibodies raised against isolates from different serogroups (1,4). The reagents recognize serogroups I, II and III within the genus *Tospovirus*, e.g. tomato spotted wilt (TSWV), tomato chlorotic spot (TCSV), groundnut ringspot (GRSV), and Impatiens necrotic spot virus (INSV) (1,4,6) in DAS-ELISA (2). For increased test security, different plant tissue dilutions (1:50 and 1:250), applied in duplicate wells, are suggested. Samples are homogenised 1:50 (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/monoclonal; conjugate: monoclonal

References

- (1) Adam, G., Lesemann, D.E., and Vetten, H.J. 1991. ann. Appl. Biol. 118:87-104.
- (2) Clark, M.F., and Adams, A. N. 1977. J. gen. Virol. 34:475-483.
- (3) De Àvila, A.C: 1992. Diversity of Tospoviruses. Thesis Agricultural .University of Wageningen. 136 pp.
- (4) De Àvila, A.C., de Haan, P., Kormelink, R., Resende, R. de O., Goldbach, R.W., and Peters, D. 1993. J. Gen. Virol. 74:153-159.
- (5) Francki, R.I.B., Fauquet, C.M., Knudson, D.L., and Brown, F. 1991. Pages 281-283 in Archives of Virology, Supplement 2, 1-450.
- (6) Law, M.D., and Moyer, J.W. 1990. J. gen. Virol. 71:933-938.

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.