

# 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 Synonyms: BR-01, CNPH <sub>1</sub> , TSWV-L3	I	
TCSV	Tomato chlorotic spot virus Synonym: BR-03	II	Type I
GRSV	Groundnut ringspot virus Synonyms: TSWV-peanut, SA-05	II	Type II
INSV	Impatiens necrotic spot virus Synonyms: TSWV-I, NL-07	III	

\* 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; 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 96, 480 or 960 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](http://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.