

Product Information: DAS-ELISA

Tobacco necrosis virus (TNV)

Synonym: Alphanecrovirus nicotianae (TNV A) and Betanecrovirus nicotianae (TNV D)

TNV (2) is readily transmitted by mechanical inoculation to a wide range of plants, but usually does not infect them systemically. Soil-borne, it is transmitted by zoospores of the chytrid fungus *Olpidium brassicae*. Main diseases are tulip necrosis, bean stipple streak, ABC disease of potato tubers and one form of cucumber necrosis. The virus has been also obtained from pear trees showing ring pattern and bark split symptoms, from grapevines and from citrus. The distribution of the virus is world-wide, common in irrigated fields, but also in unsterilized soil in glasshouses.

Specificity and sampling instruction

The reagents were made against isolates of TNV from tomatoes and dahlia (Mo Akius, *personal communication*) and specifically react with TNV in DAS-ELISA (1). The reagents detect TNV in different crops such as potatoes, vegetables (e.g., tomato, bean, cucumber), small fruits (e.g., strawberry), field crops (e.g., tobacco), and ornamentals (e.g., dahlia, tulips) (Mo Akius, *personal communication*). Samples are homogenised 1:20 (w/v) in extraction buffer «General» (Art. No. 110120).

The product was developed in cooperation with the Swedish University of Agricultural Sciences, Department of Plant Protection Sciences, Alnarp, Sweden.

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) Kassanis, B. 1970. Descriptions of plant viruses. No. 14. CMI/AAB. 4 pp.

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.