

## Product Information: DAS-ELISA

# Leek yellow stripe virus (LYSV)

Synonym: Potyvirus ampeloprasii

LYSV (2) is transmitted by aphid species in the non-persistent manner and by inoculation with sap. The virus infects leek and a few other *Allium* species. In nature, the virus is largely limited to leek in which it causes irregular yellow striping of the whole lamina, especially at its base. Whole leaves may also be yellow. Affected plants are less juicy and weigh less than normal, the leaves are slightly flaccid, the white stems are lustreless and the keeping quality of the harvested product is impaired. Infected plants in autumn and winter crops suffer more than healthy plants from frost and may be killed. Leaf streaking is more white and severe when the plants are co-infected with shallot latent virus. The occurrence of the virus has been reported from several European countries and New Zealand.

## Specificity and sampling instruction

These reagents were made against a leek (*Allium porrum*) isolate from Singapore (1). The antigen for rabbit immunization was purified from *Chenopodium quinoa*. The reagents specifically react with LYSV in DAS-ELISA (3). Isolates from all *Allium* species are detected. A special extraction buffer «Bulbs & Tubers» (Art. No. 110122), containing egg albumin (ovalbumin) is applied at a ratio of 1:20 (w/v) for testing *Allium* species (bulbs and leaves). For testing other host plant species, the extraction buffer «General» (Art. No. 110120) is used.

The product is based on antibodies developed by the Julius Kühn-Institut (JKI) Braunschweig, Germany (Bundesforschungsinstitut für Kulturpflanzen; Institut für Epidemiologie & Pathogendiagnostik).

## Information on the antibodies

Coating IgG: polyclonal; conjugate: polyclonal

## References

- (1) Barg, E., Lesemann, D.E., Vetten, H.J., and Schönfelder, M. 1995. Advances in Vegetable Virus Research. Proc. 8th Conf. on Virus Diseases of Vegetables. Prague, Czech Republic, pp. 29-31.
- (2) Bos, L. 1981. Descriptions of Plant Viruses. No. 240. CMI/AAB. 4 pp.
- (3) Clark, M.F., and Adams, A. N. 1977. J. gen. Virol. 34:475-483.

## 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](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.

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Adaptations from last version: added revised taxonomy of ICTV and assays of individual ELISA reagents.