

## Product Information: DAS-ELISA

# Bean common mosaic virus (BCMV)

## Synonym: Potyvirus phaseovulgaris

Bean common mosaic virus (BCMV; synonyms: Bean common mosaic virus – serotype B, Bean mosaic virus, Bean virus 1, Phaseolus virus 1, blackeye cowpea mosaic virus, cowpea (aphid-borne) mosaic virus, cowpea (blackeye) mosaic virus, cowpea vein-banding mosaic virus, peanut stripe virus), a potyvirus, is causing an important disease of beans in sensitive varieties worldwide (2). Main affected crops are different beans (Phaseolus species) and lupines (e.g. Lupinus luteus). Typical symptoms in bean consist of green mosaic and downward cupping along the main vein of each leaflet. Green vein banding, blistering, and malformation are common in leaves of the same plant. Plants are reduced in size, and pods may be mottled and malformed. BCMV is seed-borne in bean and is efficiently transmitted by several aphid species. The virus is most effectively controlled by growing resistant cultivars and using virus-free seed.

## Specificity and sampling instruction

The reagents contain antibodies against BCMV isolate F506 and isolate PV28 from ATCC New York (M. Turina, personal communication) and react specifically with BCMV in DAS-ELISA (1). All strains of BCMV tested so far have been detected. Samples are homogenized 1:20 (w/v) in extraction buffer «General» (Art. No. 110120).

The product is based on antibodies from the National Research Council (Institute for Sustainable Plant Protection), Torino, Italy.

## 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) Morales, F.J. and Bos, L. 1988. Descriptions of plant viruses. No. 337. CMI/AAB. 6pp.

## 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.