



Product Information: DAS-ELISA

Maize chlorotic mottle virus (MCMV)

MCMV is the only member of the genus *Machlomovirus* (family *Tombusviridae*). The virus infects members of the family *Gramineae* (sugarcane, maize). MCMV can be transmitted by different insects such as beetles or thrips. Mechanical and seed transmission has also been demonstrated (1;2). On maize, symptoms are various and ranged from mild chlorotic mottle to severe stunting, leaf necrosis, and premature plant death. When MCMV co-infects maize with another virus from the family *Potyviridae* (such as SCMV-Sugarcane mosaic virus or MDMV-Maize dwarf mosaic virus), it causes a severe disease called Maize Lethal Necrosis (MLN) which leads to almost 100% field loss. SCMV (Art. No. 140475) and MDMV (Art. No. 140375) are also available as DAS-ELISA reagents at BIOREBA.

Specificity and sampling instruction

This reagent was made against an isolate purified from maize plants. The original host is a maize plant collected in Kenya in 2012 (Dr. W. Menzel, personal communication).

For testing leaves, samples are homogenised 1:20 (w/v) in extraction buffer «General» (Art. No. 110120). For testing seed samples, addition of 10 g/L of Ovalbumin to the extraction buffer is recommended.

The product was developed in cooperation with the „Deutsche Sammlung von Mikroorganismen und Zellkulturen GmbH“ (DSMZ), Braunschweig, Germany. The validation was made in collaboration with a reference laboratory (Dr. M. Mezzalama, CIMMYT, Mexico).

References

- (1) Cabanas D., Watanabe S., Higashi CH., Bressan A. 2013. J. Econ. Entomol. 106 (1): 16-24.
- (2) Uyemoto JK. 1983. Plant Disease. 67 (1): 7-10.

Ordering Information

Pathogen	Abbr.	Art. No.	Reagent form	Size	Assays
Maize chlorotic mottle virus coating IgG: polyclonal conjugate: polyclonal	MCMV	140712	IgG	0.2 ml	1000
		140722	Conjugate	0.2 ml	1000
		140715	IgG	0.1 ml	500
		140725	Conjugate	0.1 ml	500
		140753	Positive control	2.5 ml	12
		180043	Negative control	2.5 ml	12
		140762	Reagent set 960		960
		140765	Reagent set 480		480
		140772	Complete kit 960		960
		140775	Complete kit 480		480

Reagent sets contain: IgG and conjugate, positive and negative controls, and microtiter plates (F-96) for 480 or 960 tests, respectively, for a working volume of 200 µl/test/well.

Complete kits contain: All reagents, controls, microtiter plates (F-96), buffers, and substrate necessary to perform 480 or 960 tests, respectively, for a working volume of 200 µl/test/well.

All buffers as well as equipment for sample preparation and disposables are also available.

For ordering, prices, and further information on any other product from BIOREBA, please contact your local distributor (see www.bioreba.com) or our office in Switzerland.