



ANOGEN - A Division of YES Biotech Laboratories Ltd.

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Pathogen :

LMV
Lettuce Mosaic Virus

Test format :

DAS-ELISA (alkaline phosphatase)

Catalogue number :

PSS10008

REAGENT

	Coating-Ab	AP-conjugate-Ab
Batch	80103	80104
Type	Rabbit Polyclonal	Rabbit Polyclonal
Dilution	1/100	1/100
Format	PBS / Glycerol 50%	PBS / Glycerol 50%
Storage temperature	-20° C	-20° C

Number of tests	1000
Volume per bottle of Coating-Ab*	2 X 500 µl
Volume per bottle of Conjugate-Ab*	2 X 500 µl

* Volume based on a test performed with 100 µl per well. 1 test = 1 well

QUALITY CONTROL

Value of ELISA responses (OD 405 nm)*	Positive Control	Negative Control
	2.037	0.043

* ELISA responses were measured 1 hour after incubation of substrate (pNPP) at +37° C.



CHARACTERISTICS OF THE DISEASE

Lettuce mosaic virus (**LMV**), member of the genus *Potyvirus* within the family *Potyviridae*, is the causal agent of lettuce mosaic, the most devastating viral disease of lettuce. LMV is transmitted by aphid vectors in a nonpersistent manner as well as by seeds. LMV may completely destroy lettuce fields if control measures are not taken, such as the elimination of weed hosts, the use of virus-free seed, and the use of resistant cultivars, when available. Symptoms caused by LMV can vary considerably depending on the genotype, infective strain or stage of infection and environmental conditions. In addition to the typical symptoms of growth reduction and failure to head, sometimes necrosis and yellowing can appear.

LMV has flexuous particles of 680 to 900 nm long and 11 to 15 nm wide. The genome is positive-sense ssRNA with a VPg at the 5' end and a 3'poly-A tract and it is expressed as a polyprotein that cleaves to functional proteins.

MORE INFORMATION

German-Retana, S; Walter, J; Le Gall, O. 2008. Lettuce mosaic virus: from pathogen diversity to host interactors. *MOLECULAR PLANT PATHOLOGY*. Volume: 9. Issue: 2. Pages: 127-136.

Candresse, T; Lot, H; German-Retana, S, et al. 2007. Analysis of the serological variability of Lettuce mosaic virus using monoclonal antibodies and surface plasmon resonance technology. *JOURNAL OF GENERAL VIROLOGY*. Volume: 88. Pages: 2605-2610. Part: 9.