

# Validation report

## DAS-ELISA PMMoV

Article No.: 161777 (PMMoV Complete kit 96) / 161775 (PMMoV Complete kit 480) /  
161772 (PMMoV Complete kit 960)

### General information:

Target Pathogen	PMMoV (Pepper mild mottle virus / Tobamovirus capsici)
Genus	<i>Tobamovirus</i>
Method	DAS-ELISA

### Technical information:

Antibodies	Polyclonal antibodies developed against a PMMoV isolate from pepper.
Sampling	Leaf samples: 1:20 (w/v) in extraction buffer "General".
Controls	Negative control (NC): lyophilized extracts from healthy plants Positive control (PC): lyophilized PMMoV infected plant extracts
Working volume	200 µl / well

### Host matrix:

Tested plant material	Leaf, seed Seed transmission is possible. Mechanical transmission by inoculation.
Tested species infected	<i>Capsicum annuum</i> (Pepper) <i>Nicotiana Benthamiana</i> (Tobacco) <i>Nicotiana Clevelandii</i> (Tobacco)

### Specificity:

Analytical Specificity	100%
Number of tested samples from target organism (True Positives)	19
Diagnostic Specificity	100%
Number of tested samples non-target organism (True Negatives)	>100
Detected isolates / geographic regions (Inclusivity)	PMMoV 1174 (Switzerland, Tobacco) PMMoV 1394 (Switzerland, Tobacco) PMMoV 1394 (Switzerland, Pepper) PMMoV 171103 (Switzerland, Pepper)
Cross reaction with (Exclusivity)	-
No cross reaction tested with (Exclusivity)	ApP (Apple proliferation phytoplasma) GFkV (Grapevine fleck virus) GLRaV-3 (Grapevine leafroll-associated virus 3) SLRSV (Strawberry latent ringspot virus) TMV (Tobacco mosaic virus) ToBRFV (Tomato brown rugose fruit virus) ToMV (Tomato mosaic virus) ToRSV (Tomato ringspot virus)
No matrix effect observed with (Selectivity)	<i>Cannabis sativa</i> L. (Hemp) <i>Capsicum annuum</i> (Pepper)

	<i>Cucurbita pepo</i> subsp. <i>Pepo</i> convar. <i>Girumontiina</i> (Zucchini) <i>Nicotiana Clevelandii</i> (Tobacco) <i>Solanum lycopersicum</i> (Tomato)
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**Sensitivity:**

<b>Diagnostic Sensitivity</b>	100%
<b>Analytical Sensitivity / LoD</b>	10 <sup>-5</sup> dilution of infected tissue (pathogen titer unknown).
<b>Sensitivity on host matrix</b>	PMMoV on leaves of pepper: 1:156'250 dilution PMMoV on leaves of tobacco: 1:781'250 dilution Pathogen titer unknown
<b>Other sensitivity characteristics</b>	-

**Validation:**

<b>Internal validation</b>	2003
<b>External validation</b>	-
<b>Reproducibility</b>	100%
<b>Repeatability</b>	100%
<b>Validation information</b>	Internally, the reagents have been validated with the BIOREBA isolate collection, composed of various samples with diverse plant host range, collected within the last 40 years.

Validation release Date:  
May 27<sup>th</sup>, 2026

QC manager:



Version: 1 – 27.05.2026.