

**ANOGEN - A Division of YES Biotech Laboratories Ltd.**

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Pathogen :**CTV**
Citrus Tristeza Virus**Test format :****DAS-ELISA (alkaline phosphatase)****Catalogue number :****PSS10006****REAGENT**

	Coating-Ab	AP-Conjugate-Ab
Batch	050705	050712
Type	Mouse Monoclonal	Mouse Monoclonal
Dilution	1/1000	1/1000
Format	PBS / Glycerol 50%	PBS / Glycerol 50%
Storage temperature	-20°C	-20°C
Use by		

Number of tests	1000
Volume per bottle of Coating-Ab*	2 X 50 µL
Volume per bottle of Conjugate-Ab*	2 X 50 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
	0.907	0.018

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

CHARACTERISTICS OF THE DISEASE

Citrus tristeza virus (CTV), a member of genus *Closterovirus*, family *Closteroviridae*, is the causal agent of various diseases with dramatic effects on citrus crops, probably distributed worldwide (wherever citrus is grown). CTV dispersal to new regions occurs primarily via movement of infected plants or propagation of infected buds and then, at a local level, it can be spread by several aphid species (ie: *Toxoptera citricida*, *Aphis gossypii*) in a semi-persistent manner. Seed transmission has not been observed. This dissemination resulted in devastating epidemics, causing the debilitation and death of many millions of citrus trees. The host range of CTV generally is limited to citrus species and relatives, and the different species exhibit differential degrees of susceptibility to CTV infection.

The virions are flexuous (2000 x 11 nm in size) and contain the largest known (19.3 kb) positive-stranded RNA genome among the plant viruses. Its genome is organized into 12 open reading frames (ORFs), which potentially encode at least 19 protein products.

MORE INFORMATION

Moreno, P; Ambros, S; Albiach-Marti, MR, et al. 2008. Plant diseases that changed the world Citrus tristeza virus : a pathogen that changed the course of the citrus industry. *MOLECULAR PLANT PATHOLOGY*. Volume: 9. Issue: 2. Pages: 251-268.

Bar-Joseph, M., Marcus, R., Lee, R.F., 1989. The continuous challenge of citrus tristeza virus control. *Ann. Rev. Phytopathol.* 27, 291-316.