

Validation Report: ELISA

SRA 78900 • *Citrus tristeza virus* (CTV)



Test Characteristics

Test Name	Citrus tristeza virus	Capture Antibody	Polyclonal (Rabbit)
Catalog Number	78900	Detection Antibody	Monoclonal (Mouse)
Acronym	CTV	Format	Compound-ELISA
Genus	Closterovirus	Diluents	GEB/ECI
		Sample Dilution	1:10

Summary

This ELISA test is a qualitative serological assay for the detection of Citrus tristeza virus (CTV) in leaf and stem of citrus producing plant species. CTV is a member of the Closterovirus genus known for their Non-enveloped, flexuous and exceptionally long, filamentous virus particles. CTV is a phloem limited pathogen and it is important that adequate sample extraction is performed prior to testing. Samples should be taken from young green shoots for best results.

Diagnostic Sensitivity

True Positives	79
Correct Diagnoses	79
Percent	100%

Analytical Sensitivity

Limit of Detection: 1:3,600 dilution of infected tissue (pathogen titer unknown)

Analytical Specificity

Inclusivity:

Isolates and Geographic Regions Detected:

CTV-B7 (South Africa)	CTV-B12 (Brazil)
CTV-B13 (Brazil)	CTV-B14 (Brazil)
CTV-B17 (Brazil)	CTV-B23 (Israel)
CTV-B26 (Israel)	CTV-B29 (Japan)
CTV-B30 (Japan)	CTV-B31 (Japan)
CTV-B35 (Spain)	CTV-B37 (Taiwan/China)
CTV-B59 (South Africa)	CTV-B65 (China)
CTV-B77 (Brazil)	CTV-B140
CTV-B144 (China)	CTV-B151 (California)
CTV-B186 (Japan)	CTV-B188 (Japan)
CTV-B190 (Japan)	CTV-B192 (Corsica)
CTV-B213 (South Korea)	CTV-B214
CTV-B310 (Cuba)	CTV-B334 (California)
CTV-B352 (California)	CTV-FD284 B35
CTV-FD289 B77	CTV-FD302 B12
CTV-FD304 B11	CTV-FD308 B192



Agdia, Inc.
52642 County Road 1
Elkhart, IN 46514
574-264-2014 / 800-622-4342
www.agdia.com / info@agdia.com

p107.1
Revised: 01/21/2021
Page 1 of 2

Isolates and Geographic Regions Detected:

CTV-FD317 B31	CTV-FD320 B31
CTV-FD321 B77	CTV-FD331 B188
CTV-FD333 B67	CTV-FD337 B65
CTV-FL216	CTV-FL278 (Florida)
CTV-FS674 (Florida)	CTV-T30 (mild) (Florida)
CTV-T36 (severe) (Florida)	CTV-92
CTV-107	CTV-150 (California)
CTV-162 (California)	CTV-519
CTV-558	CTV-93179

Exclusivity:**Cross-reacts With:**

None known	
------------	--

Does Not Cross-react With:

None known	
------------	--

Diagnostic Specificity

True Negatives 98
Correct Diagnoses 98
Percent 100%

Selectivity:

No Matrix Effect Observed With:			
Citron leaves and stems	Citrange leaves and stems	Clementine leaves and stems	Grapefruit leaves and stems
Kumquat leaves and stems	Lemon leaves and stems	Lime leaves and stems	Mandarin Orange leaves and stems
Mandarin-Quat leaves and stems	Orange leaves and stems	Pummelo leaves and stems	Tangelo leaves and stems
Tangerine leaves and stems	Tangor leaves and stems	Trifoliata Orange leaves and stems	



Agdia, Inc.
52642 County Road 1
Elkhart, IN 46514
574-264-2014 / 800-622-4342
www.agdia.com / info@agdia.com