



ImmunoStrip® Validation Report

On-site Plant Pathogen Testing

InvictDetect™

ISK 49700

ImmunoStrip®

Phone: 800-622-4342
Sales Email: info@agdia.com
Technical Email: techsupport@agdia.com

Test Characteristics

Test Name	InvictDetect	Capture Antibody	Monoclonal (Mouse)
Catalog Number	49700	Detection Antibody	Monoclonal (Mouse)
Acronym	InvictDetect	Format	Lateral Flow Device
		Diluents	AEB2
		Sample Dilution	5 ants : 100µL AEB2

Summary

The InvictDetect ImmunoStrip is used to identify the red imported fire ant (RIFA), *Solenopsis invicta*, by detection of the Soli2 protein. RIFA is responsible for billions of dollars of damage, annually, to the agricultural industry. More importantly, it poses a safety risk to human and animal health. InvictDetect takes the guesswork out of identification because it is 100% specific to the soli2 protein found in RIFA venom. The protocol is simple to follow and provides the user with results in only 10 minutes. The test is appropriate for testing a pooled sample containing five (5) worker ants. This protocol is not intended for individual ant testing. ImmunoStrips are the perfect screening tool for use in the field, greenhouse, and the lab.

Analytical Sensitivity

Limit of Detection: 0.625 µg/mL of purified Soli2 protein

Diagnostic Sensitivity and Specificity

True Positives	180	True Negatives	150	Total Samples	330
Correct Diagnoses	180	Correct Diagnoses	150	Correct Diagnoses	330
Percent	100%	Percent	100%	Number of Operators	5
				Number of Lots	3
				Percent	100%

Selectivity:

No Matrix Effect Observed With:

<i>Camponotus spp.</i>	<i>Dorymyrmex bureni</i>	<i>Linepithema humile</i>	<i>Monomorium floricola</i>
<i>Nylanderia fulva</i>	<i>Tetramorium spp.</i>	<i>Trachymyrmex septentrionalis</i>	

Analytical Specificity

Inclusivity and Exclusivity:

Proteins Detected:

<i>Soli2 (Solenopsis invicta ants)</i>	
--	--

Does Not Cross-react With:

<i>Solr2 (Solenopsis richteri ants)</i>	
---	--