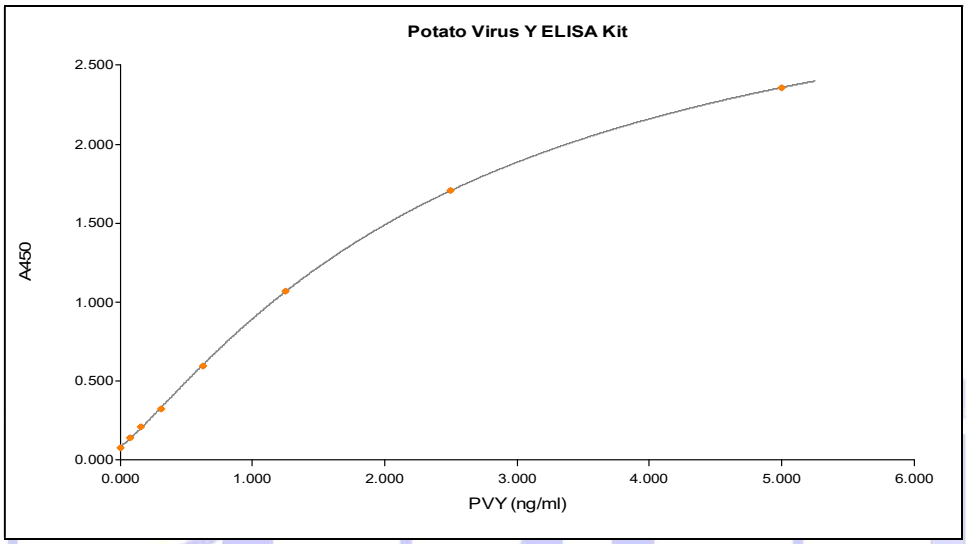
ALPHA DIAGNOSTIC INTERNATIONAL

Potato Virus Y ELISA Kit Cat# POTY-096

The Potato Virus Y ELISA Kit is a highly sensitive sandwich ELISA for the measurement of Potato Virus Y in plant extracts



PVY (ng/ml)	0	0.078	0.156	0.312	0.625	1.25	2.5	5
A450	0.078	0.145	0.214	0.327	0.598	1.07	1.708	2.359

Potato Virus Y ELISA Kit features

- Anti-PVY antibody pre-coated, ready-to-use 96-well breakable strip plate, suitable for multiple runs over 6-12 months
- Recombinant PVY Coat protein standard
- **Assay length**: 2 hours & 45 minutes. 4 incubation steps at room temperature
- **Dynamic range**: 78-5000 pg/ml
- **Sensitivity** ~20 pg/ml
- **Storage:** 2-8ºC (whole kit)
- **Shelf life**: 6-12 months

Contains all necessary reagents
For in vitro research use only

Assay Procedure: Allow all reagents to reach room temperature. Arrange and label required number of strips.

Step 1. Pipette 100 ul of appropriately diluted samples and calibrators into wells and incubate for 1 hour at room temperature.
Step 2. Wash the wells 3X with 300 ul of wash buffer for each well
Step 3. Add 100 ul of Biotin conjugated detection antibody to each well and incubate for 1 hour at room temperature
Step 4 Wash the wells 3X with 300 ul of wash buffer for each well
Step 5. Add 100 ul of Streptavidin HRP conjugated detection antibody to each well and incubate for 30 minutes at room temperature
Step 6 Wash the wells 3X with 300 ul of wash buffer for each well
Step 7. Add 100 ul of TMB Substrate solution to all wells, mix gently, and incubate at room temperature for 15 minutes.
Step 8. Pipette 100 ul of stop solution into each well and mix gently. Measure at 450 nm w/ 630 nm as a reference filter if available.

Performance Characteristics

Sensitivity: ~20 pg/ml
Average recovery: 100 ±15%
Average linearity: 100 ±15%
Precision: Intra-assay: <10% Inter-assay: <10%

Minimum recommended dilution
Plant extracts: 20-fold
Note: Minimum recommended dilution represents the dilution which is needed to eliminate matrix interference effects and obtain optimal recovery. All samples must be diluted to at least the minimum recommended ratio. Samples may be further diluted if the sample values fall within the standard curve, if sample volume is to be preserved, or if the sample value is above the highest OD on the standard curve

General Information

Potato virus Y (PVY) is a pathogenic plant virus belonging to the family Potyviridae. PVY infection of potatoes results in a variety of symptoms. The most detrimental is 'Potato tuber necrotic ringspot disease' (PTNRD). PVY is transmissible by aphid vectors but may also remain dormant in seed potatoes. PVY infects many important plant species such as potatoes, tobacco, tomatoes, and pepper. PVY may be transmitted to potatoes through grafting, plant sap inoculation, and aphid transmission.

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