

Product no **AS26 5157**

SA | Salicylic Acid ELISA quantitation kit (5*96T)

Product information

Background: Plant salicylic acid is a vital plant hormone and phenolic compound that regulates growth, development, and acts as the plant's primary immune system mediator against pathogens and environmental stress. Involved in plant immunity and defence, stress tolerance, growth and development and thermogenesis. This assay employs the competitive inhibition enzyme immunoassay technique. The microtiter plate provided in this kit has been pre-coated with Plant Salicylic Acid. Standards or samples are added to the appropriate microtiter plate wells then with a biotin-conjugated antibody specific to Plant Salicylic Acid. Next, Avidin conjugated to Horseradish Peroxidase (HRP) is added to each microplate well and incubated. After TMB substrate solution is added. The enzyme-substrate reaction is terminated by the addition of sulphuric acid solution, and the colour change is measured spectrophotometrically at a wavelength of $450\text{nm} \pm 10\text{nm}$. The concentration of Plant Salicylic Acid in the samples is then determined by comparing the OD of the samples to the standard curve.

Reaction wells: 5x96 wells (five set ups of 12 strips x 8 wells)

Assay development time: 2.5 hours

Sensitivity: 0.6 ng/ml

Detection range: 1.57-100 ng/ml

Plant extract volume: 50/well μl

Detection wavelength | 450 nm

Intra-assay precision (within an assay): CV%<8 %

Intra-assay precision (between assays): CV%<10%

Specificity: No significant cross-reactivity or interference between Plant Salicylic Acid and analogues was observed.

Expiry date: 6 months from purchase

Storage: 2-8°C

Product citation: to be added when available.

Manual in Pdf

Application information