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Agrisera AB | Box 57 | SE-91121 Vännäs | Sweden | +46 (0)935 33 000 | www.agrisera.com

Product no **AS26 5154**

GA | Gibberellic Acid ELISA quantitation kit (96T)

Product information

Background: plant gibberellic acid (GA3) is a potent, naturally occurring hormone that acts as a powerful growth messenger, which regulates key developmental processes throughout a plant's life cycle, including stimulating cell division and elongation, breaking seed dormancy, and triggering flowering and fruit development.

This ELISA assay utilizes the principle of competitive binding to measure the concentration of GA in plant extracts. The GA (gibberellic acid) has been pre-coated on the surface of the reaction wells. The plant extract sample, containing unknown amount of GA, or standards, are mixed in the appropriate reaction wells with a known amount of the biotin-conjugated anti-GA antibody. During incubation, the competitive inhibition reaction occurs between pre-coated GA and hormone in the samples with the GA-specific antibody.

Unbound hormone and plant extract are washed out of the reaction wells. Avidin conjugated to Horseradish Peroxidase (HRP) is added to each microplate well and incubated followed by the addition of TMB substrate solution for the reaction development. 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 nm ± 10 nm. The colour develops in opposite to the amount of GA in the sample or standards. The concentration of GA in the samples is then determined by comparing the OD of the samples to the standard curve.

Reaction wells: 96 wells (12 strips x 8 wells)

Assay development time: 2.5 hours

Sensitivity: 52 ng/ml

Detection ragne: 156.25-100 00 ng/ml

Plant extract volume: 50-100 µl

Species tested: *Brassica napus, Ginko biloba, Phoenix dactylifera*

Detection wavelength | 450 nm

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

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

Specificity: This assay has high sensitivity and excellent specificity for detection of Plant GA.No significant cross-reactivity or interference between Plant GA 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