Datasheet for ABIN6973585

Abscisic Acid ELISA Kit

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Overview

Quantity:	96 tests
Target:	Abscisic Acid (ABA)
Reactivity:	Plant
Method Type:	Competition ELISA
Detection Range:	0.156 µg/mL - 10 µg/mL
Minimum Detection Limit:	0.156 µg/mL
Application:	ELISA

Product Details

Purpose:	For the quantitative determination of endogenic plant hormone abscisic acid (ABA) concentrations in plant tissues.
Sample Type:	Plant Tissue
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Sensitivity:	0.04 µg/mL
Components:	• Assay plate • Standard • HRP-conjugate (100 x concentrate) • Sample Diluent • HRP-conjugate Diluent • Wash Buffer (25 x concentrate) • TMB Substrate

Product Details

- Stop Solution
- Adhesive Strip

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Target Details

Target:	Abscisic Acid (ABA)
Alternative Name:	hormone abscisic acid,ABA (ABA Products)
Target Type:	Chemical
Background:	ABA

Application Details

Application Notes:	Optimal working dilution should be determined by the investigator.
Sample Volume:	50 µL
Assay Time:	1 - 4.5 h
Plate:	Pre-coated
Protocol:	1. Prepare reagents, samples and standards as instructed. 2. Set a Blank well without any solution. 3. Add 50 µL standard or sample to each well. 4. Add 50 µL HRP-conjugate (1x) to each well (Not to Blank well). 5. Incubate 1 hour at 37 °C 6. Aspirate and wash 5 times. 7. Add 90 µL of TMB Substrate to each well. Incubate for 20 minutes at 37 °C. Protect from light. 8. Add 50 µL Stop Solution to each well. Read at 450 nm within 5 minutes.
Reagent Preparation:	Note: γ Kindly use graduated containers to prepare the reagent. γ Bring all reagents to room temperature (18-25 °C) before use for 30 min. γ Prepare fresh standard for each assay. Use within 4 hours and discard after use. γ Making serial dilution in the wells directly is not permitted. γ To minimize imprecision caused by pipetting, use small volumes and ensure that pipettors are calibrated. It is recommended to suck more than 10 µL for once pipetting. γ Distilled water is recommended to be used to make the preparation for reagents. Contaminated water or container for reagent preparation will influence the detection result. γ Antibody (1x) - Centrifuge the vial before opening. Antibody requires a 100-fold dilution. A suggested 100-fold

dilution is 10 µL of Antibody + 990 µL of Antibody Diluent. γ HRP-conjugate (1x) - Centrifuge the vial before opening. HRP- conjugate requires a 100-fold dilution. A suggested 100-fold dilution is 10 µL of HRP- conjugate + 990 µL of HRP- conjugate Diluent. γ Sample Extraction Buffer(1x)- If crystals have formed in the concentrate, warm up to room temperature and mix gently until the crystals have completely dissolved. Dilute 20 mL of Sample Extraction Buffer Concentrate (25 x) into deionized or distilled water to prepare 500 mL of Sample Extraction Buffer(1x). γ Wash Buffer(1x)- If crystals have formed in the concentrate, warm up to room temperature and mix gently until the crystals have completely dissolved. Dilute 20 mL of Wash Buffer Concentrate (25 x) into deionized or distilled water to prepare 500 mL of Wash Buffer (1 x). 6 γ Standard Centrifuge the standard vial at 6000-10000rpm for 30s before opening. Dilute the Standard(10x) with Sample Diluent. A suggested 10-fold dilution is 50 µL of Standard(10x) + 450 µL of Sample Diluent. This diluted Standard (S7) serves as the high standard (10 µg/mL). Do not substitute other diluents. Mix the standard to ensure complete dilution and allow the standard to sit for a minimum of 15 minutes with gentle agitation prior to making dilutions. Pipette 250 µL of Sample Diluent into each tube (S0-S6). Use the diluted Standard (S7) solution to produce a 2-fold dilution series (below). Mix each tube thoroughly before the next transfer. Sample Diluent serves as the zero standard (0 µg/mL). Note:

- Kindly use graduated containers to prepare the reagent.
- Bring all reagents to room temperature (18-25 °C) before use for 30 min.
- Prepare fresh standard for each assay. Use within 4 hours and discard after use.
- Making serial dilution in the wells directly is not permitted.
- To minimize imprecision caused by pipetting, use small volumes and ensure that pipettors are calibrated. It is recommended to suck more than 10 µL for once pipetting.
- Distilled water is recommended to be used to make the preparation for reagents. Contaminated water or container for reagent preparation will influence the detection result.
- Antibody (1x) - Centrifuge the vial before opening. Antibody requires a 100-fold dilution. A suggested 100-fold dilution is 10 µL of Antibody + 990 µL of Antibody Diluent.
- HRP-conjugate (1x) - Centrifuge the vial before opening. HRP- conjugate requires a 100-fold dilution. A suggested 100-fold dilution is 10 µL of HRP- conjugate + 990 µL of HRP- conjugate Diluent.
- Sample Extraction Buffer(1x)- If crystals have formed in the concentrate, warm up to room temperature and mix gently until the crystals have completely dissolved. Dilute 20 mL of Sample Extraction Buffer Concentrate (25 x) into deionized or distilled water to prepare 500 mL of Sample Extraction Buffer(1x).
- Wash Buffer(1x)- If crystals have formed in the concentrate, warm up to room temperature and mix gently until the crystals have completely dissolved. Dilute 20 mL of Wash Buffer Concentrate (25 x) into deionized or distilled water to prepare 500 mL of Wash Buffer (1 x).
- Standard Centrifuge the standard vial at 6000-10000rpm for 30s before opening. Dilute the Standard(10x) with Sample Diluent. A suggested 10-fold dilution is 50 µL of Standard(10x) + 450 µL of Sample Diluent. This diluted Standard (S7) serves as the high standard (10 µg/mL).

Application Details

	Do not substitute other diluents. Mix the standard to ensure complete dilution and allow the standard to sit for a minimum of 15 minutes with gentle agitation prior to making dilutions. Pipette 250 µL of Sample Diluent into each tube (S0-S6). Use the diluted Standard (S7) solution to produce a 2-fold dilution series (below). Mix each tube thoroughly before the next transfer. Sample Diluent serves as the zero standard (0 µg/mL).
Sample Preparation:	• It is recommended to use fresh samples without long storage, otherwise protein degradation and denaturationmay occur in these samples, leading to false results. Samples should therefore be stored for a short periodat 2 - 8 °C or aliquoted at -20 °C (≤1 month) or -80 °C (≤ 3 months). Repeated freeze-thawcycles should be avoided. Prior to assay, the frozen samples should be slowly thawed and centrifuged toremove precipitates. • If the sample type is not specified in the instructions, a preliminary test is necessary to determinecompatibility with the kit. • If a lysis buffer is used to prepare tissue homogenates or cell culture supernatant, there is a possibilityof causing a deviation due to the introduced chemical substance.The recommended dilution factor is for reference only. • Please estimate the concentration of the samples before performing the test. If the values are not in therange of the standard curve, the optimal sample dilution for the particular experiment has to be determined.Samples should then be diluted with PBS (pH =7.0-7.2).
Assay Precision:	Intra-assay Precision (Precision within an assay): CV%<10% Three samples of known concentration were tested twenty times on one plate to assess. Inter-assay Precision (Precision between assays): CV%<20% Three samples of known concentration were tested in twenty assays to assess.
Restrictions:	For Research Use only

Handling

Storage:	4 °C,-20 °C
Storage Comment:	Unopened kit Store at 2 - 8°C. Do not use the kit beyond the expiration date. Opened kit May be stored for up to one month at 2 - 8° C. *Provided this is within the expiration date of the kit.
Expiry Date:	6 months

Publications

Product cited in:	Zuo, Yu, Wang, Hu, Piao, Du, Lian, Wang, Yu, Wang, Wang, Chan, Chen, Wang, Zhang: " Parkinson's Disease with Fatigue: Clinical Characteristics and Potential Mechanisms Relevant to α-Synuclein Oligomer." in: **Journal of clinical neurology (Seoul, Korea)**, Vol. 12, Issue 2, pp. 172-80, (2016) (PubMed).

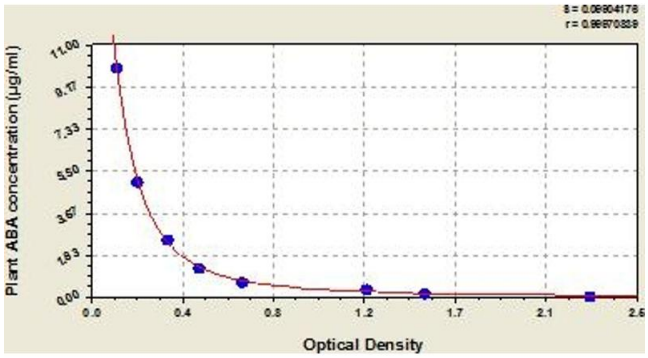
Publications

Krishnan, Rani: "Evaluation of selenium, redox status and their association with plasma amyloid/tau in Alzheimer's disease." in: **Biological trace element research**, Vol. 158, Issue 2, pp. 158-65, (2014) (PubMed).

Apori, Brozynski, El-Sayed, Herr: "Microfluidic validation of diagnostic protein markers for spontaneous cerebrospinal fluid rhinorrhea." in: **Journal of proteome research**, Vol. 12, Issue 3, pp. 1254-65, (2013) (PubMed).

van den Boogaard, Kox, Quinn, van Achterberg, van der Hoeven, Schoonhoven, Pickkers et al.: " Biomarkers associated with delirium in critically ill patients and their relation with long-term subjective cognitive dysfunction; indications for different pathways governing delirium in inflamed ..." in: **Critical care**, Vol. 15, Issue 6, pp. R297, (2012) (PubMed).

Images



ELISA

Image 1. Typical Standard Curve