



# Hordein Microplate Assay Kit

**Catalog # AS0154**

Detection and Quantification of Hordein Content in Tissue extracts,  
Powder Samples.

This instruction must be read in its entirety before using this product.

For research use only, Not for use in diagnostic procedures.

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I. INTRODUCTION.....	2
II. KIT COMPONENTS.....	3
III. MATERIALS REQUIRED BUT NOT PROVIDED.....	3
VI. SAMPLE PREPARATION.....	4
V. ASSAY PROCEDURE.....	5
VI. CALCULATION.....	6
VII. TYPICAL DATA.....	7
VIII. TECHNICAL SUPPORT.....	7
IX. NOTES.....	7

## I. INTRODUCTION

Hordein Microplate Assay Kit is a sensitive assay for determining Hordein content in plant samples. The color intensity, measured at 595 nm, is proportionate to Hordein content in the sample.

## II. KIT COMPONENTS

Component	Volume	Storage
96-Well Microplate	1 plate	
Assay Buffer I	30 ml x 2	4 °C
Assay Buffer II	30 ml x 2	4 °C
Assay Buffer III	30 ml x 2	4 °C
Dye Reagent	20 ml x 1	4 °C
Standard	Powder x 1	-20 °C
Technical Manual	1 Manual	

### Note:

Standard: add 1 ml distilled water to dissolve before use, the concentration will be 0.2mg/ml.

## III. MATERIALS REQUIRED BUT NOT PROVIDED

1. Microplate reader to read absorbance at 595 nm
2. Distilled water
3. Pipettor
4. Pipette tips
5. Mortar
6. Ice
7. Centrifuge
8. Timer
9. Lab rotator

#### IV. SAMPLE PREPARATION

##### 1. For tissue samples

Weigh out 0.05 g tissue, homogenize with 0.5ml Assay Buffer I on ice, transfer it to centrifuge tube and mix on a lab rotator for 30 minutes; centrifuged at 10000g 4°C for 10 minutes, discard the supernatant; then add 0.5ml Assay Buffer II into the tube, mix on a lab rotator for 30 minutes; centrifuged at 10000g 4°C for 10 minutes, discard the supernatant; then add 0.5ml Assay Buffer III into the tube, mix on a lab rotator for 30 minutes, take the supernatant into a new centrifuge tube and keep it on ice for detection.

##### 2. For powder samples

Weigh out 0.05 g powder, add 0.5ml Assay Buffer I to dissolve, mix on a lab rotator for 30 minutes; centrifuged at 10000g 4°C for 10 minutes, discard the supernatant; then add 0.5ml Assay Buffer II into the tube, mix on a lab rotator for 30 minutes; centrifuged at 10000g 4°C for 10 minutes, discard the supernatant; then add 0.5ml Assay Buffer III into the tube, mix on a lab rotator for 30 minutes, take the supernatant into a new centrifuge tube and keep it on ice for detection.

## V. ASSAY PROCEDURE

Add following reagents into the microplate:

Reagent	Sample	Standard	Blank
Sample	10 $\mu$ l	--	--
Standard	--	10 $\mu$ l	--
Distilled water	--	--	10 $\mu$ l
Dye Reagent	200 $\mu$ l	200 $\mu$ l	200 $\mu$ l
Mix, wait for 2 minutes, measured at 595 nm and record the absorbance.			

## VI. CALCULATION

1. According to the weight of sample

$$\text{Hordein(mg/g)} = \frac{C_{\text{Standard}} \times V_{\text{Standard}} \times (\text{OD}_{\text{Sample}} - \text{OD}_{\text{Blank}})}{(\text{OD}_{\text{Standard}} - \text{OD}_{\text{Blank}}) \times (V_{\text{Sample}} \times W / V_{\text{Assay}})}$$
$$= 4 \times (\text{OD}_{\text{Sample}} - \text{OD}_{\text{Blank}}) / (\text{OD}_{\text{Standard}} - \text{OD}_{\text{Blank}}) / W$$

$C_{\text{Standard}}$ : the standard concentration, 2 mg/ml;

$V_{\text{Standard}}$ : the volume of standard, 10  $\mu\text{l}$  = 0.01 ml;

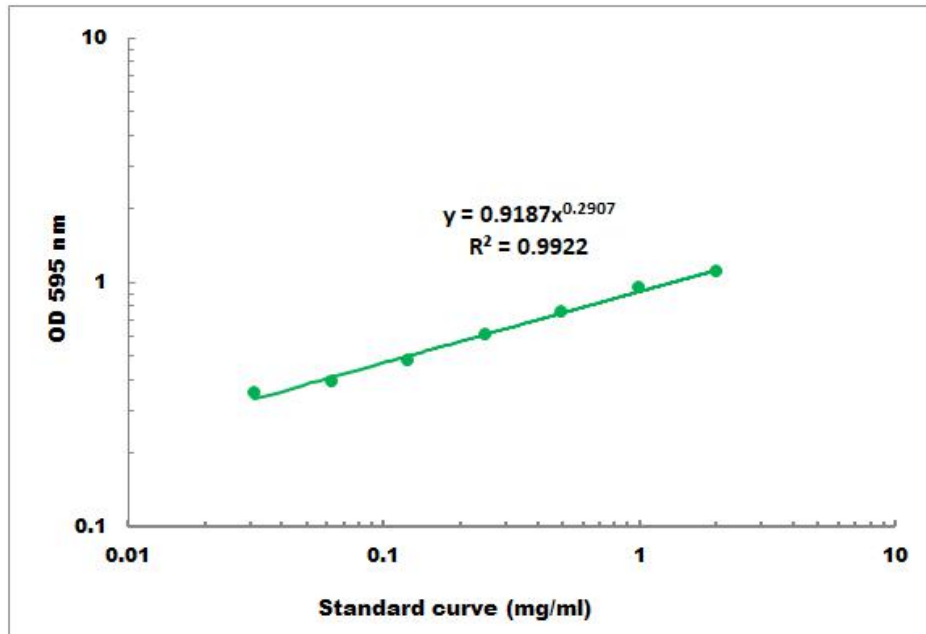
$V_{\text{Sample}}$ : the volume of sample, 10  $\mu\text{l}$  = 0.01 ml;

$W$ : the weight of sample, g;

$V_{\text{Assay}}$ : the volume of Assay Buffer III, 0.5 ml.

## VII. TYPICAL DATA

The standard curve is for demonstration only. A standard curve must be run with each assay.



Detection Range: 0.02mg/ml - 2mg/ml

## VIII. TECHNICAL SUPPORT

For troubleshooting, information or assistance, please go online to [www.sabbiotech.cn](http://www.sabbiotech.cn) or contact us at [techcn@signalwayantibody.com](mailto:techcn@signalwayantibody.com)

## IX. NOTES