

# Glycolate Oxidase Activity Assay Kit

Cat No: HR3BC1294

For research use only

## Overview

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| Detection Method    | Colorimetric method                                                                                                                                                                                                                                                                                                                                                                                                |
| Storage             | 2-8°                                                                                                                                                                                                                                                                                                                                                                                                               |
| Instrument          | Spectrophotometer (324 nm)                                                                                                                                                                                                                                                                                                                                                                                         |
| Assay Time          | 30 min                                                                                                                                                                                                                                                                                                                                                                                                             |
| Validity            | 6                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Assay Type          | Enzyme Activity                                                                                                                                                                                                                                                                                                                                                                                                    |
| Sample Type         | plant tissue                                                                                                                                                                                                                                                                                                                                                                                                       |
| Synonyms            |                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Instrument          | Spectrophotometer (324 nm)                                                                                                                                                                                                                                                                                                                                                                                         |
| Detection Principle | Glycolate oxidase catalyzes sodium glycolate substrate to form glyoxylic acid, which reacts with phenylhydrazine hydrochloride to form phenylhydrazone glyoxalate. The substance has an absorption peak at 324 nm, and its OD value is proportional to the concentration of phenylhydrazone glyoxalate in a certain range, and the amount of phenylhydrazone generated reflects the activity of glycolate oxidase. |
| Reagents            |                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Labware             | Test tube, Micropipettor, Vortex mixer, Optical path cuvette (1 mL of volume, 1 cm optical diameter)                                                                                                                                                                                                                                                                                                               |
| Size                | 100 Assays                                                                                                                                                                                                                                                                                                                                                                                                         |
| Sensitivity         | 0.3 U/mL                                                                                                                                                                                                                                                                                                                                                                                                           |
| Detection Range     | 0.3-350 U/mL                                                                                                                                                                                                                                                                                                                                                                                                       |
| Recovery Rate       | 102                                                                                                                                                                                                                                                                                                                                                                                                                |