

HRP Fluorescence Substrate System (Catalog# TBS5026)

ADHP based Substrate for HRP Activity Detection

DESCRIPTION

10-Acetyl-3,7-dihydroxyphenoxazine (ADHP), also known as Amplex Red or Ampliflu Red, is not only a sensitive and stable fluorogenic substrate for horseradish peroxidase (HRP), it is an ultrasensitive probe for H₂O₂. In the presence of HRP and H₂O₂, ADHP generates highly fluorescent resorufin that fluoresces red with a maximum absorption of 570nm and maximum emission of 585nm. ADHP is currently the most sensitive and stable fluorogenic probe for detecting HRP and H₂O₂ and has been used widely to detect HRP in many immunoassays such as ELISA.

TribioScience's HRP Fluorescence System combines ADHP and buffers into a single ready-to-use reagent for detecting HRP enzyme activity in liquid system or ELISA. Fluorescence can be measured with excitation at 535nm and emission at 585nm. This substrate system is about 10x more sensitive than the HRP substrate TMB. It provides a quick, efficient, and sensitive system for evaluating HRP activity and ELISA.

APPLICATION

- Detection of HRP activity in liquid systems such as ELISA.
- Western Blot or other immunoassays.
- Custom packaging and bulk purchase information available upon request.

KEY FEATURES

- **Sensitive and accurate:** 10 time more sensitive than TMB substrate for HRP detection.
- **Simple:** Just add- incubate-read.

KIT CONTENTS

Component	Amount
ADHP Solution	20mL
Developer	50μL
HRP	100μL (0.5 U/mL)

Storage conditions: Store the kit at -20°C, protected from light.
Shelf life: 3 months.

ASSAY PROCEDURES

1. Prepare enough ADHP working solution by adding 1μL Developer into 1mL ADHP solution according to your established procedures in ELISA.
2. Add 100μL of ADHP working solution to each well. Incubate for 30minutes at room Temperature.
3. Read plate in microplate reader at (Ex535nm/Em585nm).
4. Use the fluorometric value for each sample and standard to determine the HRP concentration.

RELATED PRODUCTS:

Tryptase Activity Assay (Catalog# TBS2101)
 β-Hexosaminidase Activity Assay (Catalog# TBS2105)
 Cytochrome C Oxidase Activity Assay (Catalog# TBS2115)
 Fast Glucose Determination Colorimetric/Fluorometric Assay (Catalog# TBS2087)
 Glucose Oxidase Activity Colorimetric/Fluorometric Assay (Catalog# TBS2088)
 Non-esterified Fatty Acid Assay (Catalog# TBS2203)
 Glycerol Colorimetric / Fluorometric Assay (Catalog# TBS2204)
 Protein Assay Kits (Catalog# TBS2005)
 Cell Nuclear Extract kit (Catalog# TBS6025)

For research use only.