For life science research only.
Not for use in diagnostic procedures.

ABTS Solution

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Ready-to-use ELISA substrate for peroxidase-driven indicator reactions.

Cat. No. 11 684 302 001 3 x 100 ml
for 1,500 to 3,000 reactions

Store the product at +2 to +8°C.

1. General Information

1.1. Contents

Vial / bottle	Label	Function / description	Content
1	ABTS Solution	▪ Stabilized and ready-to-use. ▪ Contains 2,2′-azino-di-[3-ethylbenzthiazoline sulfonate(6)] and H_2O_2 in glycine/citric acid buffer. ▪ Slightly green color.	3 vials, 100 ml each

1.2. Storage and Stability

Storage Conditions (Product)

When stored at +2 to +8°C, the product is stable through the expiry date printed on the label.

Vial / bottle	Label	Storage
1	ABTS Solution	Store at +2 to +8°C.

1.3. Additional Equipment and Reagent required

For ELISA assay

- Microplate
- Microplate reader

1.4. Application

ABTS Solution is a chromogenic substrate for peroxidase in ELISA assays.

Product Description

ABTS Solution is supplied as a one-component reagent, ready-to-use, and at working dilution. This solution is an excellent substrate for enzyme immunoassays with horseradish peroxidase as marker enzyme.

- Low reagent background.
- High signal-to-noise ratio.

2. How to Use this Product

2.1. Before you Begin

General Considerations

Precautions

This product is considered as non-hazardous.
- Avoid contact with skin and eyes.
- In case of contact, clean with large amounts of water.

Waste disposal

The product can be disposed of by pouring down the drain.

2.2. Protocols

ELISA assay

Consider the following information prior to setting up the assay.
- A $_{405\ nm/1cm}$ should be 0.060.
- Do not contaminate the ABTS Solution. Heavy metal ions or traces of peroxidase can produce a dark green ABTS solution and is not suitable for the assay.
- To slow the velocity of the color generation, reduce the concentrations of conjugate and/or antibodies in the immunoassay. Do not dilute the substrate.
- Color development starts with the addition of the substrate and is linear with time. To get the optimal signal range and to avoid running out of the detection range of the microplate reader, take repeated measurements.
- In endpoint assays, the addition of aqueous sodium dodecyl sulfate (0.5% SDS* final concentration) will give the most stable endpoint signal.

1. Equilibrate the ABTS Solution to +15 to +25°C.

2. Wash microplate carefully to reduce background of nonspecifically bound marker enzyme.

3. Add 100 to 200 µl of ABTS solution to each well.
   Color reaction starts immediately.

4. Incubate at +20 to +37°C until positive samples show a green color and can be clearly distinguished from the color of pure peroxidase substrate (control sample).

5. Shake plate in order to get a homogeneous solution. Measure the absorbance of the samples at 405 nm with a reference wavelength of approximately 490 nm using a microplate reader.

3. Additional Information on this Product

3.1. Quality Control

For lot-specific certificates of analysis, see section, **Contact and Support**.

4. Supplementary Information

4.1. Conventions

To make information consistent and easier to read, the following text conventions and symbols are used in this document to highlight important information:

Text convention and symbols	
Information Note: Additional information about the current topic or procedure.	
Important Note: Information critical to the success of the current procedure or use of the product.	
① ② ③ etc.	Stages in a process that usually occur in the order listed.
❶ ❷ ❸ etc.	Steps in a procedure that must be performed in the order listed.
* (Asterisk)	The Asterisk denotes a product available from Roche Diagnostics.

4.2. Changes to previous version

Layout changes.
Editorial changes.

4.3. Ordering Information

Product	Pack Size	Cat. No.
Reagents, kits		
Sodium Dodecyl Sulfate (SDS)	1 kg	11 667 289 001

4.4. Trademarks

ABTS is a trademark of Roche.
All other product names and trademarks are the property of their respective owners.

4.5. License Disclaimer

For patent license limitations for individual products please refer to:
List of biochemical reagent products.

4.6. Regulatory Disclaimer

For life science research only. Not for use in diagnostic procedures.

4.7. Safety Data Sheet

Please follow the instructions in the Safety Data Sheet (SDS).

4.8. Contact and Support

To ask questions, solve problems, suggest enhancements or report new applications, please visit our **Online Technical Support Site**.

To call, write, fax, or email us, visit **sigma-aldrich.com**, and select your home country. Country-specific contact information will be displayed.

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