3050 Spruce Street, St. Louis, MO 63103 USA
Tel: (800) 521-8956 (314) 771-5765 Fax: (800) 325-5052 (314) 771-5757
email: techservice@sial.com sigma-aldrich.com

Product Information

2,2′-Azino-bis(3-ethylbenzothiazoline-6-sulfonic acid) diammonium salt tablet
10 mg substrate per tablet

Catalog Number **A9941**
Store at Room Temperature

CAS RN 30931-67-0
Synonyms: AzBTS-$(NH_4)_2$; Diammonium 2,2′-azino-bis(3-ethylbenzothiazoline-6-sulfonate)

Product Description

2,2′-Azino-bis(3-Ethylbenzthiazoline-6-Sulfonic Acid) is a chromogen suitable for use in ELISA procedures which utilize horseradish peroxidase conjugates.[1-3] This substrate produces a soluble end product that is green in color and can be read spectrophotometrically at 405 nm.[4,5]

Tablet Properties
Substrate Content: 10 mg

Appearance: Green, round tablet, 5/32" in diameter

Tablet Weight: 35 mg (range 31.5-38.5 mg)

Solubility (*): Clear, colorless to a clear, light green solution

Dissolution Time (*): Not more than 5.0 minutes

pH: 5.0 (range 4.2-5.8) in 100 mL of deionized water

Activity: 100% (range 90-110%)

Packaging: 50 or 100 tablets per box individually foil-wrapped for ease of use, storage, and safety.

(*) One tablet dissolved in 100 mL of deionized water.

Storage

Store at Room Temperature.

Precautions and Disclaimer

This product is for Research Use Only. Not for Use in Diagnostic Procedures. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

Preparation Instructions

- Dissolve 1 tablet in 100 mL of 0.05 M phosphate-citrate buffer, pH 5.0 (e.g., Catalog Number P4809). Add 25 µL of fresh 30% hydrogen peroxide. (e.g., Catalog Number H1009) immediately prior to use.
  Or
- Alternatively, dissolve 1 tablet in 100 mL of 0.05 M phosphate-citrate buffer, pH 5.0, containing 0.03% sodium perborate (e.g. Catalog Number P4922).

Buffer Preparation:
To prepare 0.05 M phosphate-citrate buffer, pH 5.0:

1. Add 25.7 mL of 0.2 M dibasic sodium phosphate (e.g. Catalog Number S0876) to 24.3 mL of 0.1 M citric acid (e.g. Catalog Number C7129).
2. Adjust the buffer volume to 100 mL with deionized water.
3. Adjust the pH to 5.0, if necessary.

References

1. Jones, A.R. *et al*., *Biotechnol. J.*, **9(5)**, 664-674 (2014).
2. Yadirgi, G. *et al.*, *J. Immunol. Methods*, **451**, 90-99 (2017).
3. Gallati, V.H., *J. Clin. Chem. Clin. Biochem.*, **17(1)**, 1-7 (1979).
4. Porstmann, B. *et al.*, *J. Clin. Chem. Clin. Biochem.*, **19(7)**, 435-439 (1981).

PCS,GCY,MAM 11/18-1