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ProductInformation

TAPS SigmaUltra

Product Number **T 9659** Storage Temperature 2-8 °C

Product Description

Molecular Formula: $C_7H_{17}NO_6S$ Molecular Weight: 243.3 CAS Number: 29915-38-6 $pK_a = 8.4 (25 \ ^{\circ}C)$ $\Delta(pK_a)/\Delta T = -0.018^1$ Synonyms: [(2-Hydroxy-1,1bis(hydroxymethyl)ethyl)amino]-1-propanesulfonic acid, N-[Tris(hydroxymethyl)methyl]-3aminopropanesulfonic acid

Trace elemental analyses have been performed on the SigmaUltra TAPS. The Certificate of Analysis provides lot-specific results. SigmaUltra TAPS is for applications which require tight control of elemental content.

TAPS is a zwitterionic buffer used in biochemistry and molecular biology. It has a useful pH range of 7.7 - 9.1. TAPS is utilized in capillary electrophoresis of such materials as DNA and DNA-dye complexes.^{2,3,4,5} Dyes have been separated by planar chromatography with electroosmotic flow with 1 mM TAPS in the mobile phase.⁶ The stability constants of metal ions with TAPS have been investigated by capillary electrophoresis.⁷

TAPS has been shown to inhibit connexin channel activity.⁸ The activity of various mutants of carbonic anhydrase I and carbonic anhydrase II has been studied in a variety of buffers, including TAPS.^{9,10,11}

Precautions and Disclaimer

For Laboratory Use Only. Not for drug, household or other uses.

Preparation Instructions

This product is soluble in water (500 mg/ml), yielding a clear, colorless solution.

References

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