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ProductInformation

Potassium acetate

Product Number **P 1190**
Store at Room Temperature

Product Description

Molecular Formula: $KC_2H_3O_2$
Molecular Weight: 98.14
CAS Number: 127-08-2
Melting Point: 292 °C[1]

This product is designated as Molecular Biology grade and is suitable for molecular biology applications. It has been analyzed for the absence of nucleases and proteases.

Potassium acetate is used as a buffer in molecular biology research, notably in the isolation of DNA. It is effective in the pH range 3.8 - 5.8. The preparation of a potassium acetate/acetic acid buffer for the isolation of mammalian DNA has been reported.[2] Protocols that use potassium acetate have been published on the isolation of DNA from soil samples.[3,4]

Potassium acetate may be utilized in the isolation of RNA intermediates and products from *in vitro* splicing reactions performed with a HeLa cell nuclear extract.[5] Potassium acetate has been used to study the interactions between the TATA box binding protein from *Pyrococcus woesei* and an oligonucleotide with a specific binding site.[6] The use of potassium acetate in the analysis of oligogalacturonic acids by high-performance anion-exchange chromatography has been described.[7]

Precautions and Disclaimer

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

Preparation Instructions

This product is soluble in water (100 mg/ml), yielding a clear, colorless solution. It is also soluble in alcohol. The pH of a 0.1 M aqueous solution of potassium acetate is 9.7.[1]

References

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3. Krsek, M., and Wellington, E. M., Comparison of different methods for the isolation and purification of total community DNA from soil. J. Microbiol. Methods, **39(1)**, 1-16 (1999).
4. Yeates, C., et al., PCR amplification of crude microbial DNA extracted from soil. Lett. Appl. Microbiol., **25(4)**, 303-307 (1997).
5. Reichert, V., and Moore, M. J., Better conditions for mammalian *in vitro* splicing provided by acetate and glutamate as potassium counterions. Nucleic Acids Res., **28(2)**, 416-423 (2000).
6. O'Brien, R., et al., The effects of salt on the TATA binding protein-DNA interaction from a hyperthermophilic archaeon. J. Mol. Biol., **279(1)** 117-125 (1998).
7. Hotchkiss, A. T., Jr., et al., Isolation of oligogalacturonic acids up to DP 20 by preparative high-performance anion-exchange chromatography and pulsed amperometric detection. Carbohydr. Res., **334(2)**, 135-140 (2001).

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