

Product Information Sheet

Ammonium acetate

Catalogue Number **A 1542**

Storage Temperature RT

Product Description

Molecular Formula: $C_2H_7NO_2$

Molecular Weight: 77.08

CAS Number: 631-61-8

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

Ammonium acetate is a widely used reagent in molecular biology and chromatography. Its applications include the purification and precipitation of DNA^{1,2,3} and protein crystallization.⁴

Ammonium acetate is commonly used in HPLC and MS analysis of various compounds, such as oligosaccharides,⁵ proteins,⁶ and peptides.⁷ A procedure for

Precautions and Disclaimer

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

Preparation Instructions

This product is soluble in water (570 mg/ml), yielding a clear, colorless solution.

References

1. Stemmer, W. P., A 20-minute ethidium bromide/high-salt extraction protocol for plasmid DNA. *Biotechniques*, **10(6)**, 726 (1991).
2. Saporito-Irwin, S. M., et al., Ammonium acetate protocol for the preparation of plasmid DNA suitable for mammalian cell transfections. *Biotechniques*, **23(3)**, 424-427 (1997).
3. Molecular Cloning: A Laboratory Manual, 3rd ed., Sambrook, J., and Russell, D. W., CSHL Press (Cold Spring Harbor, NY: 2001), pp. 10.20-10.21, A8.12.
4. Shilton, B. H., et al., Crystallization of a soluble form of the Kex1p serine carboxypeptidase from *Saccharomyces cerevisiae*. *Protein Sci.*, **5(2)**, 395-397 (1996).
5. Barroso, R., et al., On-line high-performance liquid

chromatography/mass spectrometric characterization of native oligosaccharides from glycoproteins. *Rapid Commun. Mass Spectrom.*, **16(13)**, 1320-1329 (2002).

6. Troxler, H., et al., Electrospray ionization mass spectrometry: analysis of the Ca^{2+} -binding properties of human recombinant alpha-parvalbumin and nine mutant proteins. *Anal. Biochem.*, **268(1)**, 64-71 (1999).

7. Cummings, J., et al., Development of a gradient elution high-performance liquid chromatography assay with ultraviolet detection for the determination in plasma of the anticancer peptide [Arg^6 , D- $\text{Trp}^{7,9}$, mePhe 8]-substance P (6-11) (antagonist G), its major metabolites and a C-terminal pyrene-labelled conjugate. *J. Chromatogr. B. Biomed. Sci. Appl.*, **732(2)**, 277-285 (1999).

8. Yang, Q., et al., Analysis of lipophilic peptides and therapeutic drugs: on-line-nonaqueous capillary electrophoresis-mass spectrometry. *J. Biochem. Biophys. Methods*, **38(2)**, 103-121 (1999).

Notice

We provide information and advice to our customers on application technologies and regulatory matters to the best of our knowledge and ability, but without obligation or liability. Existing laws and regulations are to be observed in all cases by our customers. This also applies in respect to any rights of third parties. Our information and advice do not relieve our customers of their own responsibility for checking the suitability of our products for the envisaged purpose.

The information in this document is subject to change without notice and should not be construed as a commitment by the manufacturing or selling entity, or an affiliate. We assume no responsibility for any errors that may appear in this document.

Contact Information

For the location of the office nearest you, go to SigmaAldrich.com/offices.

Technical Service

Visit the tech service page on our web site at SigmaAldrich.com/techservice.

Standard Warranty

The applicable warranty for the products listed in this publication may be found at SigmaAldrich.com/terms.