

Product Information

Silver nitrate Plant Cell Culture Tested

Product Number **S 7276**
Storage Temperature -0 °C

Product Description

Molecular Formula: AgNO₃
Molecular Weight: 169.9
CAS Number: 7761-88-8
Melting Point: 212 °C¹

This product is plant cell culture tested (0.02 mg/ml) and is appropriate for use in plant cell culture experiments.

Silver nitrate occurs naturally as the mineral ore acanthite. Silver nitrate is used in such applications as photography, the manufacture of mirrors, silver plating, the production of sympathetic (invisible) and indelible inks, and the coloring of porcelain.¹

Silver nitrate is commonly used to stain protein gels for identification of proteins (Product Code PROT-SIL1 and PROT-SIL2), as it binds to selective amino acid residues under weakly acidic or neutral pH conditions, notably to lysines.^{2,3,4,5} Silver nitrate is also utilized in the staining of nucleic acids and of glycoconjugates in gels.^{6,7} Silver nitrate is used in the chromatography of lipids, by HPLC and by TLC.^{8,9} In analytical chemistry, silver nitrate is used for the titrimetric determination of chloride content.¹⁰

Silver nitrate is a source of silver ions in biological studies, such as in toxicological investigations on yeast and marine animals.^{11,12,13} It has been used to induce the protein conformational condition of amyloid A amyloidosis in mice.¹⁴

Precautions and Disclaimer

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

Preparation Instructions

This product is soluble in water (1 g/ml), yielding a clear to slightly hazy, colorless to faint yellow solution.

References

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13. Guadagnolo, C. M., et al., Chronic effects of silver exposure on ion levels, survival, and silver distribution within developing rainbow trout (*Oncorhynchus mykiss*) embryos. *Environ. Toxicol. Chem.*, **20(3)**, 553-560 (2001).
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