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ProductInformation

Potassium iodide

Product Number **P 8256**
Store at Room Temperature

Product Description
Molecular Formula: KI
Molecular Weight: 166.0
CAS Number: 7681-11-0
Melting Point: 680 °C (volatilizes at higher temperature)[1]
Density: 3.12 g/cc[1]

Potassium iodide is a salt used in the manufacture of photographic emulsions, as a component of animal and poultry feeds, and in table salt as a source of iodine.[1]

In biochemistry, KI is often used as a fluorescence quencher.[2,3] KI has been utilized in the purification of Z-line skeletal muscle proteins from fish.[4] The use of KI to facilitate the sorption of microbial proteins into dextran hydrogels from cell lysates has been described.[5] KI has been applied in the elucidation of the crystal structure of the S100-A3 apoprotein.[6]

The use of KI in the isolation of single stranded DNA has been described.[7] A procedure has been published on the isolation of mRNA from cell lysates or subcellular fractions by KI gradient centrifugation.[8]

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

Preparation Instructions
This product is soluble in water (133 mg/ml), yielding a clear, colorless solution. The pH of aqueous KI solutions is neutral to slightly alkaline. This product is also soluble in alcohol, glycerol, and glycol.[1]

Storage/Stability
It is recommended to store this product in tightly sealed containers protected from light.

References
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3. Flowers, S., et al., Conformational dynamics of DnaB helicase upon DNA and nucleotide binding: analysis by intrinsic tryptophan fluorescence quenching. Biochemistry, **42(7)**, 1910-1921 (2003).
4. Papa, I., et al., Use of a chaotropic anion iodide in the purification of Z-line proteins: isolation of CapZ from fish white muscle. Protein Expr. Purif., **17(1)**, 1-7 (1999).
5. Putka, C. S., et al., Recovery and separation of cell lysate proteins using hydrogels guided by aqueous two-phase extraction principles. Biotechnol. Bioeng., **80(2)**, 139-143 (2002).
6. Mittl, P. R., et al., Metal-free MIRAS phasing: structure of apo-S100A3. Acta Crystallogr. D Biol. Crystallogr., **58(Pt 8)**, 1255-1261 (2002).
7. Rubenstein, J. L., et al., Subtractive hybridization system using single-stranded phagemids with directional inserts. Nucleic Acids Res., **18(16)**, 4833-4842 (1990).
8. Munzner, P., and Voigt, J., A convenient procedure for the isolation of intact translatable mRNA by potassium iodide gradient centrifugation. J. Biochem. Biophys. Methods, **18(3)**, 183-193 (1989).

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