

6-Benzylaminopurine

CAS Number: 1214-39-7

Storage Temperature: Room Temperature

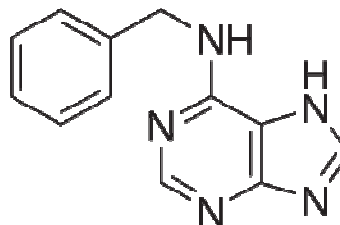
Product Number: A8170

Product Description :

Appearance: White powder

Molecular formula: C₁₂H₁₁N₅

Molecular weight: 225.25



Solubility/ Solution Stability:

Stock solutions of 6-Benzylaminopurine are prepared at a concentration of **1 mg/ml**. The solvents of choice are e.g. **25 % (v/v) aqueous DMSO** or dissolving BAP in a small volume of **2 N NaOH** and subsequent dilution to **1 mg/ml with water**.

General Usage:

6-Benzylaminopurine (BAP) is one of the most active **synthetic cytokinin** used in plant breeding and tissue culture. Several physiological effects are observed: regeneration of plants from callus, fruit-set and seed development, soybean pod set enhancement, hypocotyl elongation by elongation of cells and cell division, retarded senescence. Some of the effects observed are based on the stimulation of cell division. The transcription of the *wpk4* gene, coding for a wheat protein kinase homolog, is upregulated by BAP. Otherwise, the activity of respiratory kinases is inhibited. Assays with mammalian cells have shown that human myeloid leukemia cells are induced to differentiate into granulocytes upon treatment with BAP.