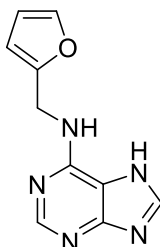


Kinetin

Code No.: **BIA-K2593**

Pack sizes: **1 mg, 5 mg**



Synonyms : 6-Furfuryladenine, FAP, KT, Kinetin (plant hormone), N-Furfuryladenine, N6-(Furfurylamino)purine, N6-Furfuryladenine, NSC 23119

Specifications

CAS #	: 525-79-1
Molecular Formula	: C₁₀H₉N₅O
Molecular Weight	: 215.21
Source	: Synthetic
Appearance	: White powder
Purity	: >95% by HPLC
Long Term Storage	: -20°C
Solubility	: Soluble in methanol or DMSO

Application Notes

The cytokinin, kinetin, was identified as a factor required for cell division present in vascular stem tissue and leaves of tobacco, other plants and yeast in the 1950s. Kinetin promotes cell division and wound healing in plants. Low doses of kinetin reduce apoptosis and protect mammalian cells such as HL60 cells, HaCaT human keratinocyte cells, and human peripheral lymphocytes cells from oxidative stress-mediated cell death.

References

1. Kinetin, a cell division factor from deoxyribonucleic acid. Miller C.O. et al. J Am Chem Soc. 1955, 77, 1392.
2. Effects of kinetin on plant growth and chloroplast ultrastructure of two Pteris species under arsenate stress. Li Q. et al. Ecotoxicol Environ Saf. 2018, 158, 37.
3. The plant hormone cytokinin confers protection against oxidative stress in mammalian cells. Othman E.M. et al. PLoS One 2016, 11:e0168386.
4. Kinetin delays the onset of aging characteristics in human fibroblasts. Rattan I.S. and Clark B.F.C. Biochem Biophys Res Commun. 1994, 201, 665.