NSC 348884
Item No. 16716

CAS Registry No.: 81624-55-7
Formal Name: N^3,N^3,N^2,N^2-tetrakis[(6-methyl-1H-benzimidazol-2-yl)methyl]-1,2-ethanediamine
MF: C_{38}H_{40}N_{10}
FW: 636.8
Purity: ≥98%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid
UV/Vis: λ_{max} 247, 281, 287 nm

Laboratory Procedures
For long term storage, we suggest that NSC 348884 be stored as supplied at -20°C. It should be stable for at least two years.

NSC 348884 is supplied as a crystalline solid. A stock solution may be made by dissolving the NSC 348884 in the solvent of choice. NSC 348884 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of NSC 348884 in these solvents is approximately 1, 10, and 20 mg/ml, respectively.

NSC 348884 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, NSC 348884 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. NSC 348884 has a solubility of approximately 0.25 mg/ml in a 1:2 solution of DMF/PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Nucleophosmin is a nucleolar phosphoprotein involved in cell proliferation, cytoplasmic/nuclear shuttle transportation, nucleic acid binding, ribonucleic cleavage, centrosome duplication, and molecular chaperoning. Its activity is dependent on oligomerization at its N-terminal domain, and it is abundantly expressed in tumor and developing cells where it serves to inhibit both cellular differentiation and apoptosis.\(^1\) NSC 348884 is a small molecule that inhibits the formation of nucleophosmin dimers by disrupting a required binding pocket. It can inhibit cell proliferation and induce apoptosis in various cancer cell lines with IC\textsubscript{50} values ranging from 1.4-4 \textmu M.\(^2\)

References

Related Products
For a list of related products please visit: www.caymanchem.com/catalog/16716

SAFETY DATA
This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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Said refund or replacement is conditioned on Buyer giving written notice to Cayman within thirty (30) days after arrival of the material at its destination. Failure of Buyer to give said notice within thirty (30) days shall constitute a waiver by Buyer of all claims hereunder with respect to said material.

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