# Data Sheet (Cat.No.T6909)



### NSC348884

## **Chemical Properties**

Molecular Weight:

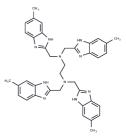
CAS No.: 81624-55-7

Formula: C38H40N10

Appearance: no data available

636.79

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year



# **Biological Description**

| Description   | NSC348884 is a nucleophosmin inhibitor disrupts oligomer formation and induces apoptosis, inhibits cell proliferation at an IC50 of 1.7-4.0 µM in distinct cancer cell lines.                                                                                                                                                                                                                      |
|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Targets(IC50) | Apoptosis,p53                                                                                                                                                                                                                                                                                                                                                                                      |
| In vitro      | NSC348884 disrupts a defined hydrophobic pocket required for oligomerization.  NSC348884 disrupts nucleophosmin oligomer formation by native polyacrylamide gel electrophoresis assay. NSC348884 upregulates p53. NSC348884 induces apoptosis.                                                                                                                                                     |
| In vivo       | In vivo invasion and intravasation (that is, the number of CTCs) are significantly inhibited after injection of NSC348884(as an inhibitor of NPM1 oligomerization) into the tumor-bearing mice. No significant difference in overall cell death is observed by histology in the treated tumors with the 4-hour brief treatments, suggesting that the inhibition seen is specific to migration.[2]. |

## **Solubility Information**

| Solubility | DMSO: 50 mg/mL (78.52 mM), Sonication is recommended.           |  |
|------------|-----------------------------------------------------------------|--|
|            | (< 1 mg/ml refers to the product slightly soluble or insoluble) |  |
|            |                                                                 |  |

## **Preparing Stock Solutions**

|       | 1mg       | 5mg       | 10mg       |
|-------|-----------|-----------|------------|
| 1 mM  | 1.5704 mL | 7.8519 mL | 15.7038 mL |
| 5 mM  | 0.3141 mL | 1.5704 mL | 3.1408 mL  |
| 10 mM | 0.157 mL  | 0.7852 mL | 1.5704 mL  |
| 50 mM | 0.0314 mL | 0.157 mL  | 0.3141 mL  |

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

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#### Reference

W Qi,et al. Oncogene. 2008, 27:4210-4220.

Wang X Y, Wu K H, Pang H L, et al. Study on the Role of Cytc in Response to BmNPV Infection in Silkworm, Bombyx mori (Lepidoptera). International journal of molecular sciences. 2019, 20(18): 4325.

Patsialou, et al. Breast Cancer Research. 2012, 14:R139.

Wang X Y, Wu K H, Pang H L, et al. Study on the Role of Cytc in Response to BmNPV Infection in Silkworm, Bombyx mori (Lepidoptera)[J]. International journal of molecular sciences. 2019, 20(18): 4325.

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