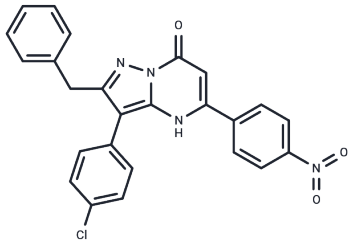
# Data Sheet (Cat.No.T5142)

TargetMol
YOUR TARGET MOLECULES

NAV-2729

## Chemical Properties



CAS No. : 419547-11-8

Formula: C25H17ClN4O3

Molecular Weight: 456.88

Appearance: no data available

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

## Biological Description

| | |
|---|---|
| Description | NAV-2729 inhibits six ArfGEFs (human ARNO, EFA6, BIG1, and BRAG2 and Legionella and Rickettsia RalF), the strongest effects being against BRAG2, Arf1 and Arf6. |
| Targets(IC50) | Others,GTPase |
| In vitro | NAV-2729(25 μM) inhibits spontaneous nucleotide exchange of Δ13Arf6 by ~15%. NAV-2729 inhibits the activation of Δ13Arf6 by BRAG2Sec7PH by 25%. Δ17Arf1 has no measurable spontaneous nucleotide exchange. Activation of Δ17Arf1 by BRAG2Sec7PH is inhibited by NAV-2729, and the efficiency is markedly higher than that for Arf6 (50%). In a dose-response experiment, nucleotide exchange rates are reduced by 50% by 10 μM NAV-2729 for Δ17Arf1 while 50% inhibition is not achieved even at 25 μM NAV-2729 for Δ13Arf6[1]. NAV-2729 blocks ARNO- and GEP100-mediated guanine nucleotide exchange on Arf6 and spontaneous activation of Arf6 and its activation by cytohesins and BRAG. The treatment of uveal melanoma cells with NAV-2729 interferes with anchorage-independent growth of the cell[1]. NAV-2729 is more effective toward Arf1 than Arf6[1]. |
| In vivo | In orthotopic xenograft mouse model of uveal melanoma, systemic treatment of NAV-2729 interfere with tumorigenesis and tumor growth[2]. |

## Solubility Information

| | |
|---|---|
| Solubility | DMSO: 6.88 mg/mL (15.05 mM),Sonication is recommended.<br>(< 1 mg/ml refers to the product slightly soluble or insoluble) |

Preparing Stock Solutions

| | 1mg | 5mg | 10mg |
|---|---|---|---|
| 1 mM | 2.1888 mL | 10.9438 mL | 21.8876 mL |
| 5 mM | 0.4378 mL | 2.1888 mL | 4.3775 mL |
| 10 mM | 0.2189 mL | 1.0944 mL | 2.1888 mL |
| 50 mM | 0.0438 mL | 0.2189 mL | 0.4378 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.

Reference

Benabdi S, et al. Family-wide Analysis of the Inhibition of Arf Guanine Nucleotide Exchange Factors with Small Molecules: Evidence of Unique Inhibitory Profiles. Biochemistry. 2017 Sep 26;56(38):5125-5133.