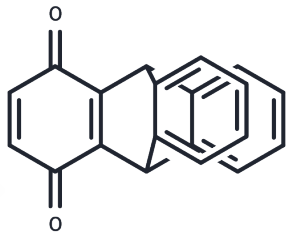
# Data Sheet (Cat.No.T21807)

TargetMol

INCA-6

## Chemical Properties



CAS No. : 3519-82-2

Formula: C20H12O2

Molecular Weight: 284.31

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

## Biological Description

| | |
|---|---|
| Description | INCA-6 (Triptycene-1,4-quinone) is a cell-permeable NFAT inhibitor that disrupts CN-NFAT signaling by targeting the NFAT(P) substrate at the calcineurin (CN) phosphatase site. |
| Targets(IC50) | Others |
| In vitro | In human retinal microvascular endothelial cells, INCA-6 (1.0, 2.5 μM) significantly decreases VEGF and serum-induced proliferation without affecting baseline proliferation[1]. In 3-Hz cells, INCA-6 (5 μM) prevents transient outward K+ current downregulation[2]. INCA-6 (10 μM) significantly inhibits ATP-induced CXCL2 expression in rat primary microglia and BV-2 cells[3]. INCA-6 (5 μM) protein expression and reduces SERCA2 transcript levels with and without thapsigargin[4]. |
| In vivo | INCA-6 (2.5, 5.0, and 25.0 μM; intravitreal) significantly reduces pathologic neovascularization in oxygen-induced retinopathy and decreases the severity of OIR in a dose dependent manner[1]. |

## Solubility Information

| | |
|---|---|
| Solubility | DMSO: 2.85 mg/mL (10.02 mM),Sonication is recommended.<br>(< 1 mg/ml refers to the product slightly soluble or insoluble) |

Preparing Stock Solutions

| | 1mg | 5mg | 10mg |
|---|---|---|---|
| 1 mM | 3.5173 mL | 17.5864 mL | 35.1729 mL |
| 5 mM | 0.7035 mL | 3.5173 mL | 7.0346 mL |
| 10 mM | 0.3517 mL | 1.7586 mL | 3.5173 mL |
| 50 mM | 0.0703 mL | 0.3517 mL | 0.7035 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.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Colin A Bretz, et al. The role of the NFAT signaling pathway in retinal neovascularization. Invest Ophthalmol Vis Sci. 2013 Oct 25;54(10):7020-7.
Ling Xiao, et al. Mechanisms underlying rate-dependent remodeling of transient outward potassium current in canine ventricular myocytes. Circ Res. 2008 Sep 26;103(7):733-42.
Miho Shiratori,et al. P2X7 receptor activation induces CXCL2 production in microglia through NFAT and PKC/MAPK pathways. J Neurochem. 2010 Aug;114(3):810-9.
Anand Mohan Prasad, et al. Silencing calcineurin A subunit reduces SERCA2 expression in cardiac myocytes. Am J Physiol Heart Circ Physiol. 2011 Jan;300(1):H173-80.