JB061

Cat. No.: HY-152205

Molecular Formula: $C_{19}H_{17}NO_4$

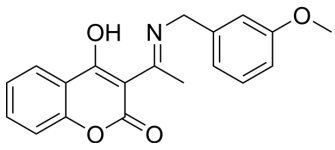
Molecular Weight: 323.34

Target: Myosin

Pathway: Cytoskeleton

Storage:

Powder	-20°C	3 years
	4°C	2 years
In solvent	-80°C	6 months
	-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 25 mg/mL (77.32 mM; ultrasonic and warming and heat to 60°C)

Preparing Stock Solutions	Mass / Solvent / Concentration	1 mg	5 mg	10 mg
	1 mM	3.0927 mL	15.4636 mL	30.9272 mL
	5 mM	0.6185 mL	3.0927 mL	6.1854 mL
	10 mM	0.3093 mL	1.5464 mL	3.0927 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

1. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.08 mg/mL (6.43 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

JB061 is a nonmuscle myosin inhibitor with IC_{50}s of 4.4 μM (Cardiac muscle myosin), 9.1 μM (Skeletal muscle myosin), and >100 μM (Smooth muscle myosin II), respectively. JB061 poorly decreases ATPase activity (IC_{50}>200 μM). JB061 shows cytotoxicity against COS-7 cells with an IC_{50} value of 39 μM[1].

IC_{50} & Target

Cardiac muscle myosin	Skeletal muscle myosin	Smooth muscle myosin II
4.4 μM (IC_{50})	9.1 μM (IC_{50})	>100 μM (IC_{50})

In Vitro

JB061 (compound 6a) (40 μM; 24 h) inhibits cytokinesis in Cos-7 cells[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Smith JD, et al. Isoform selectivities of novel 4-hydroxycoumarin imines as inhibitors of myosin II. Eur J Med Chem. 2022 Dec 12;247:115008.

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