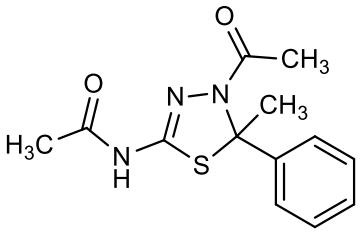
Catalog # 10-1312

K858

CAS# 72926-24-0

N-(4-Acetyl-4,5-dihydro-5-methyl-5-phenyl-1,3,4-thiadiazol-2-yl)acetamide

Lot # X105109



Selective mitotic kinesin Eg5 inhibitor (IC_{50} = 1.3 µM) which acts in an ATP-noncompetitive manner[1,2]. It is at least 150-fold more selective for Eg5 than other members of the kinesin superfamily. K858 blocks centrosome separation, activates the spindle checkpoint and induces mitotic arrest accompanied by the formation of monopolar spindles. Displays no effect on microtubule polymerization. Selectively displays antiproliferative effects via induction of mitotic cell death in cancer cells over nontransformed cells[1].

1) Nakai *et al*. (2009), *K858, a novel inhibitor of mitotic kinesin Eg5 and antitumor agent, induces cell death in cancer cells*; Cancer Res., **69** 3901
2) Indorato *et al*. (2013), *STLC-resistant cell lines as tools to classify chemically divergent Eg5 targeting agents according to their mode of action and target specificity*; Biochem. Pharmacol., Epub ahead of print Sept. 13

PHYSICAL DATA

Molecular Weight:	277.35
Molecular Formula:	$C_{13}H_{15}N_3O_2S$
Purity:	98% by TLC
	NMR: (Conforms)
Solubility:	DMSO (up to 25 mg/ml) or Ethanol (up to 3 mg/ml)
Physical Description:	White solid
Storage and Stability:	Store as supplied desiccated at room temperature for up to 1 year from the date of purchase. Solutions in DMSO or ethanol may be stored at -20°C for up to 1 month.

Focus Biomolecules LLC 400 Davis Drive, Suite 600 Plymouth Meeting PA 19462

www.focusbiomolecules.com