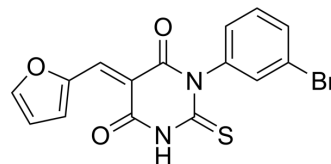


SMIFH2

Cat. No.:	HY-16931		
CAS No.:	340316-62-3		
Molecular Formula:	C ₁₅ H ₉ BrN ₂ O ₃ S		
Molecular Weight:	377.21		
Target:	Arp2/3 Complex		
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 : 125 mg/mL (331.38 mM; Need ultrasonic)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	Preparing Stock Solutions	1 mM	2.6510 mL	13.2552 mL	26.5104 mL
		5 mM	0.5302 mL	2.6510 mL	5.3021 mL
10 mM		0.2651 mL	1.3255 mL	2.6510 mL	
Please refer to the solubility information to select the appropriate solvent.					
In Vivo	1. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: 2.08 mg/mL (5.51 mM); Suspended solution; Need ultrasonic				

BIOLOGICAL ACTIVITY

Description	SMIFH2 is a formin specific inhibitor. SMIFH2 inhibits actin polymerization by Formins and affects the actin cytoskeleton ^[1] .
IC ₅₀ & Target	Formin ^[1]
In Vitro	<p>SMIFH2 (25 μM; 1-16 hours) induces dynamic cytoskeletal remodelling in U2OS cells^[1].</p> <p>SMIFH2 (25 μM) reduces p300, mDia2 and p53 levels in a proteasome-independent manner^[1].</p> <p>SMIFH2 reduces expression and activity of p53 through a post-transcriptional, proteasome-independent mechanism that influences remodelling of the cytoskeleton^[1].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <p>Western Blot Analysis^[1]</p>

Cell Line:	293T, A375, U2OS, and MDA-MB-231 cells
Concentration:	25 μ M
Incubation Time:	5 hours for 293T, U2OS, MDA-MB-231 cells; 2.5 hours for A375 cells
Result:	Downregulated mDia2, p53 and p300 protein levels.

CUSTOMER VALIDATION

- Theriogenology. 2023 Nov, 211, 40-48.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Tadamoto Isogai, et al. SMIFH2 has effects on Formins and p53 that perturb the cell cytoskeleton. Sci Rep. 2015 Apr 30;5:9802.

Caution: Product has not been fully validated for medical applications. For research use only.

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