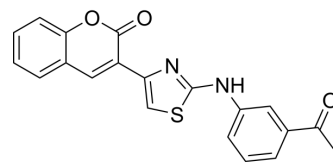


## ZINC00784494

Cat. No.:	HY-148364		
CAS No.:	317328-17-9		
Molecular Formula:	C <sub>20</sub> H <sub>14</sub> N <sub>2</sub> O <sub>3</sub> S		
Molecular Weight:	362.4		
Target:	Akt		
Pathway:	PI3K/Akt/mTOR		
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 : 100 mg/mL (275.94 mM; Need ultrasonic)			
		Solvent Concentration	Mass	
			1 mg	5 mg
			10 mg	
Preparing Stock Solutions	1 mM	2.7594 mL	13.7969 mL	27.5938 mL
	5 mM	0.5519 mL	2.7594 mL	5.5188 mL
	10 mM	0.2759 mL	1.3797 mL	2.7594 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: 2.5 mg/mL (6.90 mM); Suspended solution; Need ultrasonic			

### BIOLOGICAL ACTIVITY

Description	ZINC00784494 is a specific Lipocalin-2 (LCN2) inhibitor. ZINC00784494 inhibits cell proliferation, cell viability and reduces AKT phosphorylation levels in SUM149 cells. ZINC00784494 has good potential for research in inflammatory breast cancer (IBC) <sup>[1]</sup> .
IC <sub>50</sub> & Target	LCN2 <sup>[1]</sup> .
In Vitro	ZINC00784494 (0.01-100 μM; 72 h) reduces cell proliferation and cell viability in SUM149 cells <sup>[1]</sup> . ZINC00784494 (1, 10 μM; 15 min, 1 h) reduces the p-Akt levels in SUM149 cells <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only. Cell Viability Assay <sup>[1]</sup>

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Cell Line:	SUM149 cells
Concentration:	0.01-100 $\mu$ M
Incubation Time:	72 h
Result:	Reduced cell viability at concentrations of 1 $\mu$ M or lower.

Western Blot Analysis<sup>[1]</sup>

Cell Line:	SUM149 cells
Concentration:	1, 10 $\mu$ M
Incubation Time:	15 min, 1 h, 24 h
Result:	Reduced the p-Akt protein levels 15 min and 1 h and changes in the p-Akt protein levels were not observed at 24 h.

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## REFERENCES

[1]. Santiago-Sánchez GS, et al. Targeting Lipocalin-2 in Inflammatory Breast Cancer Cells with Small Interference RNA and Small Molecule Inhibitors. *Int J Mol Sci.* 2021 Aug 10;22(16):8581.

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

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