

Product Data Sheet

ZINC00640089

Cat. No.: HY-Q45780 CAS No.: 667880-11-7 Molecular Formula: $C_{20}H_{13}F_3N_2O_2$

Molecular Weight: 370.32

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: 12.5 mg/mL (33.75 mM; ultrasonic and warming and heat to 60°C)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.7004 mL	13.5018 mL	27.0037 mL
	5 mM	0.5401 mL	2.7004 mL	5.4007 mL
	10 mM	0.2700 mL	1.3502 mL	2.7004 mL

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

BIOLOGICAL ACTIVITY

Description ZINC00640089 is a specific Lipocalin-2 (LCN2) inhibitor. ZINC00640089 inhibits cell proliferation, cell viability and reduces

AKT phosphorylation levels in SUM149 cells. ZINC00640089 has good potential for research in inflammatory breast cancer

 $(IBC)^{[1]}$.

IC₅₀ & Target LCN2^[1].

 $\label{eq:linear_problem} \textbf{In Vitro} \qquad \qquad \textbf{ZINC00640089 (0.01-100 } \mu\text{M}; 72 \text{ h}) \ \text{reduces cell proliferation and cell viability in SUM149 cells} \ \textbf{Sum149 cells} \$

ZINC00640089 (1, 10 μ M; 15 min, 1 h) reduces the p-Akt levels in SUM149 cells^[1].

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

Cell Viability Assay^[1]

Cell Line:	SUM149 cells
Concentration:	0.01-100 μΜ

Incubation Time:	72 h	
Result:	Reduced cell viability at concentrations of 1 μM or lower.	
Western Blot Analysis ^[1]		
Cell Line:	SUM149 cells	
Concentration:	1, 10 μΜ	
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.	

CUSTOMER VALIDATION

- Sci Total Environ. 2024 Mar 13:171681.
- J Inflamm Res. 2024 Aug 23:17:5599-5618.

See more customer validations on $\underline{www.MedChemExpress.com}$

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.

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

Tel: 609-228-6898

Fax: 609-228-5909

 $\hbox{E-mail: tech@MedChemExpress.com}$

Address: 1 Deer Park Dr, Suite F, Monmouth Junction, NJ 08852, USA