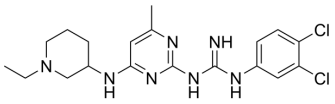
SKOG102

Cat. No.:	HY-125427
CAS No.:	21062-28-2
Molecular Formula:	$C_{19}H_{25}Cl_2N_7$
Molecular Weight:	422.35
Target:	OLIG2
Pathway:	Neuronal Signaling
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	SKOG102 is a potent OLIG2 inhibitor that is directly engaging OLIG2 and interferes with the ability of OLIG2 to bind DNA. SKOG102 can be used for the research of glioblastoma (GBM)[1].
IC_{50} & Target	OLIG2[1]
In Vitro	SKOG102 (0.1-5 μM; 72 h) inhibits human GBM4 and GBM8 cells grown as neurospheres, with IC_{50}s of 10.66 and 1.536 μM, respectively[1]. SKOG102 (0.5-5 μM; 12 h) increases p21 RNA levels and decreases OMG RNA levels in GBM4 cells[1]. SKOG102 (5 μM; 20 h) suppresses OLIG2-DNA binding, and decreases the serine phosphorylated OLIG2 and total OLIG2 protein levels in GBM8 cells[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	SKOG102 (10-20 mg/kg; i.p.) inhibits GBM4 tumor growth in mice[1]. SKOG102 (5 mg/kg; i.p.) accumulates in the tumor even over a relatively brief time period and the plasma and brain concentrations are almost identical at 4 hours after injection in mice[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	NSG mice were inoculated in each flank with GBM4 cells[1]
Dosage:	10, 15, and 20 mg/kg; dissolved in solutol:PEG400:water (20%:40%:40%)
Administration:	Intraperitoneal injection; first 2 weeks (from day 33 to 46) 10 mg/kg, third week (from day 47 to 54) 15 mg/kg, fourth week (from 55 to 66) first 3 days 20 mg/kg, 2 days break, then alternate days from day 60 to 66
Result:	Significantly attenuated tumor growth.

REFERENCES

[1]. Tsigelny IF, et, al. Multiple spatially related pharmacophores define small molecule inhibitors of OLIG2 in glioblastoma. Oncotarget. 2017 Apr 4;8(14):22370-22384.

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

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA