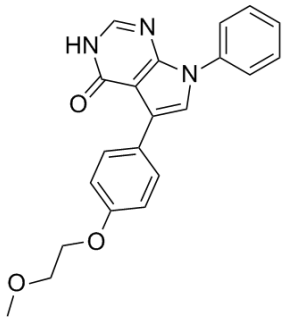
DMX-5804

Cat. No.:	HY-111754
Molecular Formula:	$C_{21}H_{19}N_3O_3$
Molecular Weight:	361.39
Target:	MAP4K
Pathway:	MAPK/ERK Pathway
Storage:	Please store the product under the recommended conditions in the COA.



BIOLOGICAL ACTIVITY

Description	DMX-5804 is a potent, orally active and selective **MAP4K4** inhibitor, with an **IC_{50}** of 3 nM, a **pIC_{50}** of 8.55 for human MAP4K4, less potent on MINK1/MAP4K6 (**pIC_{50}**, 8.18), and TNIK/MAP4K7 (**pIC_{50}**, 7.96). DMX-5804 enhances cardiomyocyte survival, and reduces ischemia-reperfusion injury in mice[1].

IC_{50} & Target			
MAP4K4 3 nM (IC_{50})	MAP4K4 8.55 (pIC_{50})	MINK1/MAP4K6 8.18 (pIC_{50})	TNIK/MAP4K7 7.96 (pIC_{50})
GCK/MAP4K2 6.50 (pIC_{50})	KHS/MAP4K5 6.36 (pIC_{50})	GLK/MAP4K3 4.95 (pIC_{50})	MLK1/MAP3K9 7.19 (pIC_{50})
MLK3/MAP3K11 6.99 (pIC_{50})	NUAK 6.88 (pIC_{50})	VEGFR 5.72 (pIC_{50})	ABL1 5.80 (pIC_{50})
Aurora B 5.49 (pIC_{50})	FLT3 5.31 (pIC_{50})	GSK3β 4.66 (pIC_{50})	

In Vitro	DMX-5804 exhibits great selectivity at MAP4K4 over other kinases, such as GCK/MAP4K2 (pIC_{50}, 6.50), GLK/MAP4K3 (pIC_{50}, 4.95), KHS/MAP4K5 (pIC_{50}, 6.36), ABL1 (pIC_{50}, 5.80), Aurora B (pIC_{50}, 5.49), FLT3 (pIC_{50}, 5.31), GSK3β (pIC_{50}, 4.66), MLK1/MAP3K9 (pIC_{50}, 7.19), MLK3/MAP3K11 (pIC_{50}, 6.99), NUAK (pIC_{50}, 6.88) and VEGFR (pIC_{50}, 5.72)[1].

REFERENCES

[1]. Fiedler LR, et al. MAP4K4 Inhibition Promotes Survival of Human Stem Cell-Derived Cardiomyocytes and Reduces Infarct Size In Vivo. Cell Stem Cell. 2019 Mar 1. pii: S1934-5909(19)30013-X.

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