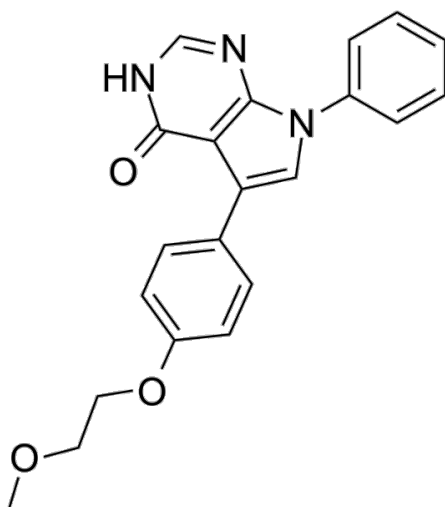


Product Data Sheet

Product Name: DMX-5804
Cat. No.: GC65298

Chemical Properties

Cas. No. 2306178-56-1
Formula C₂₁H₁₉N₃O₃ M.Wt 361.39
Solubility DMSO : 125 mg/mL (345.89 mM; Need ultrasonic) Storage Store at -20°C
General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.
Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT, or blue ice upon request.
Structure



Protocol

MAP4K4	MAP4K4	MINK1/MAP4K6	TNIK/MAP4K7	GCK/MAP4K2	KHS/MAP4K5	GLK/MAP4K3	MLK1/MAP3K9	MLK3/MAP3K11	NUAK	VEGFR	ABL
3nM(IC ₅₀)	8.55(pIC ₅₀)	8.18(pIC ₅₀)	7.96(pIC ₅₀)	6.50(pIC ₅₀)	6.36(pIC ₅₀)	4.95(pIC ₅₀)	7.19(pIC ₅₀)	6.99(pIC ₅₀)	6.88(pIC ₅₀)	5.72(pIC ₅₀)	5.80

Background

DMX-5804 is a potent, orally active and selective MAP4K4 inhibitor, with an IC₅₀ of 3 nM, a pIC₅₀ of 8.55 for human MAP4K4, less potent on MINK1/MAP4K6 (pIC₅₀, 8.18), and TNIK/MAP4K7 (pIC₅₀, 7.96). DMX-5804 enhances cardiomyocyte survival, and reduces ischemia-reperfusion injury in mice[1].

DMX-5804 exhibits great selectivity at MAP4K4 over other kinases, such as GCK/MAP4K2 (pIC₅₀, 6.50), GLK/MAP4K3 (pIC₅₀, 4.95), KHS/MAP4K5 (pIC₅₀, 6.36), ABL1 (pIC₅₀, 5.80), Aurora B (pIC₅₀, 5.49), FLT3 (pIC₅₀, 5.31), GSK3β (pIC₅₀, 4.66), MLK1/MAP3K9 (pIC₅₀, 7.19), MLK3/MAP3K11 (pIC₅₀, 6.99), NUAK (pIC₅₀, 6.88) and VEGFR (pIC₅₀, 5.72)[1].

[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.

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

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA