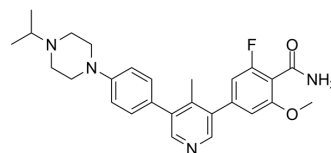


M4K2234

Cat. No.:	HY-148234												
CAS No.:	2421141-51-5												
Molecular Formula:	C ₂₇ H ₃₁ FN ₄ O ₂												
Molecular Weight:	462.56												
Target:	Anaplastic lymphoma kinase (ALK)												
Pathway:	Protein Tyrosine Kinase/RTK												
Storage:	<table border="0"> <tr> <td>Powder</td> <td>-20°C</td> <td>3 years</td> </tr> <tr> <td></td> <td>4°C</td> <td>2 years</td> </tr> <tr> <td>In solvent</td> <td>-80°C</td> <td>6 months</td> </tr> <tr> <td></td> <td>-20°C</td> <td>1 month</td> </tr> </table>	Powder	-20°C	3 years		4°C	2 years	In solvent	-80°C	6 months		-20°C	1 month
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 (216.19 mM; Need ultrasonic)

Concentration	Mass		
	1 mg	5 mg	10 mg
1 mM	2.1619 mL	10.8094 mL	21.6188 mL
5 mM	0.4324 mL	2.1619 mL	4.3238 mL
10 mM	0.2162 mL	1.0809 mL	2.1619 mL

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

BIOLOGICAL ACTIVITY

Description

M4K2234 (compound 26b) is an ALK2 inhibitor. M4K2234 inhibits ALK2 and ALK5 with IC₅₀s of 5 and 2144 nM, respectively. M4K2234 can be used as a chemical probe for ALK1 and ALK2 protein kinases. M4K2234 can be used for the research of cancer^[1].

IC₅₀ & Target

IC₅₀: 5 nM (ALK2 WT), 3 nM (ALK2 G328V), 6 nM (ALK2 R206H), 6 nM (ALK2 R258G), 2144 nM (ALK5)^[1]

In Vitro

M4K2234 (0-5 μM) shows inhibitory effects against WT and DIPG-linked mutant forms of ALK2 with IC₅₀s of 5, 3, 6 and 6 nM for WT, G328V, R206H and R258G, respectively^[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

In Vivo

Pharmacokinetic Properties of M4K2234 in Mice^[1].

Mice
PO 3 mg/kg

C_{\max} (ng/mL)	1650
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AUC_{inf} (ng·h/mL)	4630
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$t_{1/2}$ (h)	2.61
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MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Ensan D, et al. Targeting ALK2: An Open Science Approach to Developing Therapeutics for the Treatment of Diffuse Intrinsic Pontine Glioma. J Med Chem. 2020 May 14;63(9):4978-4996.

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

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