Product Data Sheet

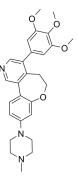
M4K2281

Cat. No.: HY-161376 Molecular Formula: $C_{27}H_{31}N_3O_4$ Molecular Weight: 461.55

Target:TGF-β ReceptorPathway:TGF-beta/Smad

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.



BIOLOGICAL ACTIVITY

Description	M4K2281 is a selecitve inhibitor for activin receptor-like kinase-2 (ALK2) with an IC ₅₀ of 2 nM. M4K2281 exhibits a moderate blood brain permeability with a brain to plasma ratio of 3.7 at $4h^{[1]}$.	
IC ₅₀ & Target	ALK2 2 nM (IC ₅₀)	ALK5 350 nM (IC ₅₀)
In Vivo	M4K2281 (25 mg/kg, p.o., single dose) exhibits a exposure in plasma concentration C _{max} of 5053 and 0 nM, at 1 hour and 24 hour in NOD-SCID mice model, respectively ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.	

REFERENCES

 $[1]. \ Gonz\'alez-\'alvarez\ H, et al., Discovery\ of\ Conformationally\ Constrained\ ALK2\ Inhibitors.\ J\ Med\ Chem.\ 2024\ Mar\ 28;67(6):4707-4725.$

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$

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