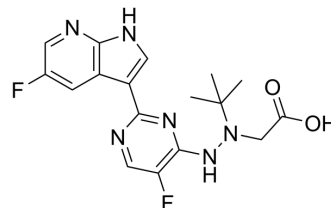


HAA-09

Cat. No.:	HY-149263
CAS No.:	1422051-33-9
Molecular Formula:	C ₁₇ H ₁₈ F ₂ N ₆ O ₂
Molecular Weight:	376.36
Target:	Influenza Virus; Virus Protease
Pathway:	Anti-infection
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	HAA-09 is an orally active and potent anti-influenza agent, targeting the influenza PB2 _{cap} binding domain. HAA-09 displays potent anti-influenza A virus activity, with an EC ₅₀ of 0.03 μM. HAA-09 shows polymerase inhibition, with an IC ₅₀ of 0.06±0.004 μM. HAA-09 blocks virus replication without causing obvious cytotoxicity ^[1] .	
IC₅₀ & Target	IC ₅₀ : 0.06±0.004 μM (polymerase); EC ₅₀ : 0.03 μM (influenza A virus) ^[1]	
In Vitro	HAA-09 exhibits a stronger antiviral activity against oseltamivir-sensitive A/WSN/33 and oseltamivir-resistant H275Y variant, superior to oseltamivir ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.	
In Vivo	HAA-09 exhibits high plasma stability (t _{1/2} ≥12 h) and no obvious hERG inhibition ^[1] . HAA-09 (0-25 mg/kg; Orally, BID) exhibits anti-influenza virus efficacy in mice ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.	
	Animal Model:	Balb/C mice ^[1]
	Dosage:	40 mg/kg
	Administration:	Orally, QD (once daily) for consecutive 3 days
	Result:	Demonstrated a favorable safety profile when orally administered in healthy mice.
	Animal Model:	Female BALB/c mice (6-8 weeks) ^[1]
	Dosage:	12.5, 25 mg/kg
	Administration:	Orally, BID (twice daily) starting 48 h post infection for 9 days
	Result:	Demonstrated in vivo therapeutic efficacy (85.7% survival observed at the day 15 post infection).

REFERENCES

[1]. Wang S, et al. Synthesis and structure-activity optimization of 7-azaindoles containing aza- β -amino acids targeting the influenza PB2 subunit. *Eur J Med Chem.* 2023 Mar 15;250:115185.

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

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