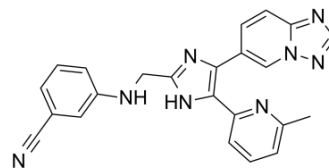


EW-7195

Cat. No.:	HY-18766
CAS No.:	1352609-28-9
Molecular Formula:	C ₂₃ H ₁₈ N ₈
Molecular Weight:	406.44
Target:	TGF-β Receptor; p38 MAPK
Pathway:	TGF-beta/Smad; MAPK/ERK Pathway
Storage:	Please store the product under the recommended conditions in the COA.



BIOLOGICAL ACTIVITY

Description	EW-7195 is a potent and selective ALK5 (TGFβR1) inhibitor with an IC ₅₀ of 4.83 nM. EW-7195 has >300-fold selectivity for ALK5 over p38α. EW-7195 efficiently inhibits TGF-β1-induced Smad signaling, epithelial-to-mesenchymal transition (EMT) and breast tumour metastasis to the lung ^[1] .	
IC₅₀ & Target	ALK5 4.83 nM (IC ₅₀)	p38α 1.5 μM (IC ₅₀)
In Vitro	EW7195 inhibits the EMT, motility, and invasiveness of breast cancer cells in vitro. EW-7195 efficiently blocks TGF-β1-induced phosphorylation of Smad2 followed by the nuclear translocation of Smad2/3. EW-7195 blocks TGF-β1-induced mesenchymal morphology. EW-7195 inhibits TGF-β-induced transcriptional activation ^[1] . EW-7195 (0.5-1 μM; 1.5 hours) efficiently inhibits TGF-β1-induced Smad2 phosphorylation ^[1] .	
In Vivo	EW7195 (40 mg/kg; i.p.; three times a week for 3/2.5 weeks) inhibits lung metastasis development in both 4T1 orthotopic xenograft and MMTV/cNeu transgenic mice ^[1] .	
	Animal Model:	MMTV/c-Neu mice ^[1]
	Dosage:	40 mg/kg
	Administration:	I.p.; three times a week for 3 weeks
	Result:	Inhibited the metastasis of breast cancer cells to the lung.
	Animal Model:	Balb/c xenograft model (10-weeks-old female Balb/c mice bearing 4T1 cells) ^[1]
	Dosage:	40 mg/kg
	Administration:	I.p.; three times a week for 2.5 weeks
	Result:	Suppressed a lung metastasis in the Balb/c Xenograft model.

REFERENCES

[1]. Park CY, et al. EW-7195, a novel inhibitor of ALK5 kinase inhibits EMT and breast cancer metastasis to lung. Eur J Cancer. 2011;47(17):2642-2653.

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

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