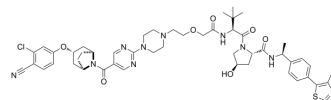


A031

Cat. No.:	HY-148777
CAS No.:	2682255-44-1
Molecular Formula:	C ₅₀ H ₆₁ ClN ₁₀ O ₇ S
Molecular Weight:	981.6
Target:	Androgen Receptor; PROTACs
Pathway:	Others; PROTAC
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	A031 is a highly effective PROTAC androgen receptor (AR) degrader with an IC ₅₀ value less than 0.25 μM for AR protein degradation. A031 has an inhibitory effect on tumor growth in zebrafish with human prostate cancer (VCaP) ^[1] .	
In Vitro	A031 (0.125-1.000 μM) shows inhibition to AR with an IC ₅₀ value less than 0.25 μM ^[1] . A031 (2 μM; 2-4.5 h) reduces the AR protein level in VCaP cell lines ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only. Western Blot Analysis ^[1]	
	Cell Line: VCaP cell lines	
	Concentration: 2 μM	
	Incubation Time: 2, 3.5 and 4.5 hours	
	Result: Reduced the AR protein level, and AR proteins was almost degraded after 4.5 h treatment.	
In Vivo	A031 (2.8, 8.3 and 25 μM; in culture solution for 5 days) inhibits prostate cancer growth in zebrafish ^[1] . Pharmacokinetic Properties of A031 in Rats ^[1] .	
	Rats IV 1 mg/kg	
	t _{1/2} (h)	0.57
	C _{max} (ng/mL)	14366.2
	AUC _{last} (h·ng/mL)	1773.8
	AUC _{INF_pred} (h·ng/mL)	1773.8
	V _{Z_pred} (L/kg)	0.47

Cl_{pred} (L/h/kg)

0.57

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Wild type AB strain zebrafish with human prostate cancer (VCap) cells transplanted ^[1]
Dosage:	2.8, 8.3 and 25 μM
Administration:	Aqueous solution culture, at 35°C, for 5 days
Result:	Inhibited tumor growth with growth inhibition rates of 28%, 55% and 61% at 2.8, 8.3 and 25 μM, respectively.

REFERENCES

[1]. Chen L, et al. Discovery of A031 as effective proteolysis targeting chimera (PROTAC) androgen receptor (AR) degrader for the treatment of prostate cancer. Eur J Med Chem. 2021 Apr 15;216:113307.

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

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