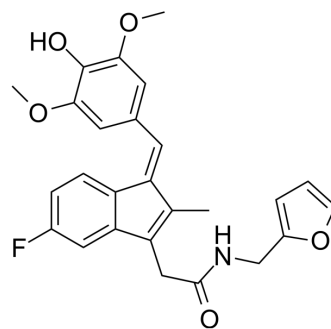


ADT-007

Cat. No.:	HY-157887		
CAS No.:	1945941-09-2		
Molecular Formula:	C ₂₆ H ₂₄ FNO ₅		
Molecular Weight:	449.47		
Target:	Ras		
Pathway:	GPCR/G Protein; MAPK/ERK Pathway		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



BIOLOGICAL ACTIVITY

Description	ADT-007 is a potent and orally active pan-RAS inhibitor with strong anticancer effects. ADT-007 binds RAS in a nucleotide-free conformation to block GTP activation. ADT-007 potently and selectively inhibits the growth of cancer cells with mutated or hyper-activated wild-type RAS isozymes ^[1] .
In Vitro	ADT-007 displays the highest potency and selectivity to inhibit the growth of KRASG13D HCT-116 cells with an IC ₅₀ of 5 nM, while RAS 110 wild-type HT-29 cells are ~100 fold less sensitive with an IC ₅₀ of 493 nM. ADT-007 displays even greater potency in KRAS G12C MIA PaCa-2 PDA cells, resulting in IC ₅₀ values as low as 2 nM. ADT-007 also potently inhibits the growth of three other mutant KRAS PDA cell lines with G12V or G12D mutations ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	ADT-007 (10 mg/kg; intra-tumoral injection; once a day; for 17-21 days) strongly inhibits tumor growth in syngeneic immune competent mouse models of colorectal cancer ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
Animal Model:	6-8-week-old BALB/C mice injected with colorectal cancer cells ^[1]
Dosage:	10 mg/kg
Administration:	intra-tumoral injection; once a day; for 17-21 days
Result:	Strongly inhibited tumor growth.

REFERENCES

[1]. Jeremy B Foote, et al. A Novel Pan-RAS Inhibitor with a Unique Mechanism of Action Blocks Tumor Growth in Mouse Models of GI Cancer. bioRxiv[Preprint]. 2024 Jan 24:2023.05.17.541233.

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

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