Product Data Sheet

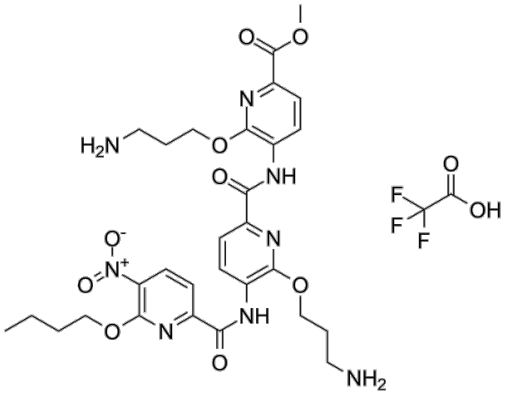
Product Name: ADH-6 TFA
Cat. No.: GC65880

Chemical Properties

Cas. No.

Formula	$C_{31}H_{37}F_3N_8O_{11}$	M.Wt	754.67
Solubility	DMSO : 100 mg/mL (132.51 mM; Need ultrasonic)	Storage	Store at -20°C
General tips	For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20°C for several months.		
Shipping Condition	Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.		

Structure



Background

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ADH-6 TFA is a tripyridylamide compound. ADH-6 abrogates self-assembly of the aggregation-nucleating subdomain of mutant p53 DBD. ADH-6 TFA targets and dissociates mutant p53 aggregates in human cancer cells, which restores p53's transcriptional activity, leading to cell cycle arrest and apoptosis. ADH-6 TFA has the potential for the research of cancer diseases[1].

ADH-6 (25 μM, 10 h) TFA inhibits aggregation of pR248W (indicated by dot blot assay) [1].
ADH-6 (5 μM, 6 h) TFA dissociates intracellular mutant p53 aggregates in MIA PaCa-2 cells [1].
ADH-6 (0-10 μM, 24 or 48 h) TFA causes selective cytotoxicity in cancer cells bearing mutant p53 (MIA PaCa-2)[1].
ADH-6 (5 μM, 24 h) TFA specifically targets and reactivates aggregation-prone mutant p53 in MIA PaCa-2 cells[1].

Cell Viability Assay[1]

Cell Line:	MIA PaCa-2 (mutant R248W p53), SK-BR-3 (mutant R175H p53)
Concentration:	0, 2.5, 5, 7.5, 10 μM
Incubation Time:	24, 48 h
Result:	Caused death of cancer cells bearing mutant, but not WT, p53.

Western Blot Analysis[1]

Cell Line:	MIA PaCa-2 cells
Concentration:	5 μM
Incubation Time:	24 h
Result:	Increased expression of p53-inducible MDM2 and proapoptotic Bax.

ADH-6 (intraperitoneal injection, 15 mg/kg, every 2 days, for a total of 12 doses) TFA causes regression of mutant p53-bearing tumors [1].

Animal Model: MIA PaCa-2 xenografts[1]

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Dosage:	716.4 μM in 0.02% DMSO
Administration:	Intraperitoneal injection, every 2 days, for a total of 12 doses
Result:	Reduced tumor growth relative to the saline-treated control group. Reduced mutant p53 levels and shrinked xenografts harboring aggregation-prone mutant p53.
Animal Model:	MIA PaCa-2 xenografts (pharmacokinetics assay) [1]
Dosage:	15 mg/kg
Administration:	Intraperitoneal injection, for a single dose
Result:	C_{max}: 21 μg/mL, $T_{1/2}$: 3.6 h

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