TAS-114

®

MedChemExpress

Cat. No.:	HY-124062	
CAS No.:	1198221-21-4	
Molecular Formula:	$C_{21}H_{29}N_{3}O_{6}S$	
Molecular Weight:	451.54	°↓ ^N ↓°°°°, N
Target:	Others	N_OS
Pathway:	Others	
Storage:	4°C, stored under nitrogen	
	* In solvent : -80°C, 6 months; -20°C, 1 month (stored under nitrogen)	

SOLVENT & SOLUBILITY

In Vitro	DMSO : 100 mg/mL (22	21.46 mM; Need ultrasonic)			
		Solvent Mass Concentration	1 mg	5 mg	10 mg
	Preparing Stock Solutions	1 mM	2.2146 mL	11.0732 mL	22.1464 mL
		5 mM	0.4429 mL	2.2146 mL	4.4293 mL
		10 mM	0.2215 mL	1.1073 mL	2.2146 mL
	Please refer to the sol	ubility information to select the ap	propriate solvent.		
In Vivo	1. Add each solvent o Solubility: ≥ 2.5 mg	one by one: 10% DMSO >> 40% PE g/mL (5.54 mM); Clear solution	G300 >> 5% Tween-80) >> 45% saline	
	2. Add each solvent c Solubility: ≥ 2.5 mg	one by one: 10% DMSO >> 90% (20 g/mL (5.54 mM); Clear solution	0% SBE-β-CD in saline)		
	3. Add each solvent o Solubility: ≥ 2.5 mg	one by one: 10% DMSO >> 90% co g/mL (5.54 mM); Clear solution	rn oil		

BIOLOGICAL ACTIV	
Description	TAS-114 is an orally active dual dUTPase/dihydropyrimidine dehydrogenase (DPD) inhibitor, can improving the therapeutic efficacy of fluoropyrimidine ^[1] .
IC ₅₀ & Target	dUTPase, DPD
In Vitro	TAS-114 (1-10 μM; 72 hours) increases the cytotoxicity of 5-Fluorouracil (5-FU) and 5-FU,2'-deoxy-5-fluorouridine (FdUrd) against various cancer cell lines in dose-dependent manner ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only. Cell Cytotoxicity Assay ^[1]

Product Data Sheet

	Cell Line:	HeLa, NUGC-4, NCI-H441, HT-29, CFPAC-1, and MCF-7 cell lines
	Concentration:	72 hours
	Incubation Time:	1 μM, 3 μM, and 10 μM
	Result:	Clearly increased the cytotoxicity of FdUrd and 5-FU against various cancer cell lines in dose-dependent manner.
ı Vivo	TAS-114 (37.5-1,200 mg	/kg/day; orally; 1-14 days) increases the antitumor activity of 5-FU when co-administers with
ı Vivo	TAS-114 (37.5-1,200 mg Capecitabine (539 mg/k MCE has not independe	(kg/day; orally; 1-14 days) increases the antitumor activity of 5-FU when co-administers with kg/day) in mice ^[1] . ently confirmed the accuracy of these methods. They are for reference only.
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CUSTOMER VALIDATION

- Cell Metab. 2021 May 4;33(5):1027-1041.e8.
- Cancer Lett. 2022 Sep 6;548:215898.

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REFERENCES

[1]. Yano W, et al. TAS-114, a First-in-Class Dual dUTPase/DPD Inhibitor, Demonstrates Potential to Improve Therapeutic Efficacy of Fluoropyrimidine-Based Chemotherapy. Mol Cancer Ther. 2018 Aug;17(8):1683-1693.

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

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