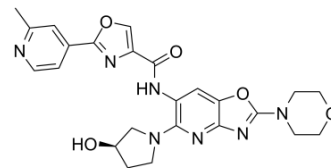


CA-4948

Cat. No.:	HY-135317		
CAS No.:	1801344-14-8		
Molecular Formula:	C ₂₄ H ₂₅ N ₇ O ₅		
Molecular Weight:	491.5		
Target:	IRAK; FLT3		
Pathway:	Protein Tyrosine Kinase/RTK		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro	DMSO : 35.71 mg/mL (72.66 mM; Need ultrasonic)						
	Preparing Stock Solutions	Solvent Concentration	Mass	1 mg	5 mg	10 mg	
				1 mM	2.0346 mL	10.1729 mL	20.3459 mL
				5 mM	0.4069 mL	2.0346 mL	4.0692 mL
				10 mM	0.2035 mL	1.0173 mL	2.0346 mL
Please refer to the solubility information to select the appropriate solvent.							
In Vivo	1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.08 mg/mL (4.23 mM); Clear solution						
	2. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.08 mg/mL (4.23 mM); Clear solution						

BIOLOGICAL ACTIVITY

Description	CA-4948 is a potent IRAK4/FLT3 inhibitor with anti-tumor activity ^[1] .	
IC ₅₀ & Target	IRAK4	FLT3
In Vitro	CA-4948 is over 500-fold more selective for IRAK-4 compared to IRAK-1. CA-4948 reduces TNF-α, IL-1β, IL-6 and IL-8 release from TLR-Stimulated THP-1 Cells with an IC ₅₀ <250 nM. CA-4948 also has antiproliferative activity due to inhibition of receptor-type tyrosine-protein kinase FLT3 ^[1] .	
In Vivo	CA-4948 shows anti-tumor activity in animal models including tumors containing MyD88 gene mutations. CA-4948	

shows antileukemic activity in mouse models of FLT3 wild-type and FLT3 mutated acute myeloid leukemia (AML)^[1].

REFERENCES

[1]. Wiese MD, et al. Investigational IRAK-4 inhibitors for the treatment of rheumatoid arthritis. *Expert Opin Investig Drugs*. 2020 Apr 17:1-8.

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

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