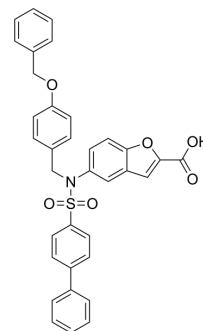


LYP-IN-3

Cat. No.:	HY-155847		
Molecular Formula:	C ₃₅ H ₂₇ NO ₆ S		
Molecular Weight:	589.66		
Target:	Phosphatase		
Pathway:	Metabolic Enzyme/Protease		
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 : 100 mg/mL (169.59 mM; Need ultrasonic)					
	Preparing Stock Solutions	Solvent	Mass	1 mg	5 mg	10 mg
		Concentration				
		1 mM		1.6959 mL	8.4795 mL	16.9589 mL
		5 mM		0.3392 mL	1.6959 mL	3.3918 mL
10 mM		0.1696 mL	0.8479 mL	1.6959 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: 2.5 mg/mL (4.24 mM); Clear solution; Need ultrasonic					
	2. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: 2.5 mg/mL (4.24 mM); Clear solution; Need ultrasonic					

BIOLOGICAL ACTIVITY

Description	LYP-IN-3 (compound D34) is a selective inhibitor of Lymphoid-tyrosine phosphatase (LYP) (K _i =0.93 μM), and regulates T-cell receptor (TCR) signaling pathway in tumor progress. LYP-IN-3 activates T-cell and inhibits M2 macrophage polarization, but upregulates PD-1/PD-L1 expression. LYP-IN-3 can be leveraged with PD-1/PD-L1 inhibitor, for futher cancer immunotherapy [1].
IC₅₀ & Target	K _i : 0.93 μM (Lymphoid-tyrosine phosphatase, LYP) ^[1]
In Vivo	LYP-IN-3 (compound D34) MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Liang X, et al. Discovery of benzofuran-2-carboxylic acid derivatives as lymphoid tyrosine phosphatase (LYP) inhibitors for cancer immunotherapy. Eur J Med Chem. 2023 Oct 5;258:115599.

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

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