## Bioymifi

Cat. No.:	HY-18377			
CAS No.:	1420071-30-2			
Molecular Formula:	$C_{22}H_{12}BrN_{3}O_{4}S$			
Molecular Weight:	494.32			
Target:	TNF Receptor; Apoptosis			
Pathway:	Apoptosis			
Storage:	Powder	-20°C	3 years	
		4°C	2 years	
	In solvent	-80°C	2 years	
		-20°C	1 year	

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## SOLVENT & SOLUBILITY

In Vitro	DMSO : 12.5 mg/mL (25.29 mM; Need ultrasonic)					
Preparing Stock Solutions		Solvent Mass Concentration	1 mg	5 mg	10 mg	
	1 mM	2.0230 mL	10.1149 mL	20.2298 mL		
		5 mM	0.4046 mL	2.0230 mL	4.0460 mL	
		10 mM	0.2023 mL	1.0115 mL	2.0230 mL	
	Please refer to the so	lubility information to select the app	propriate solvent.			
In Vivo	1. Add each solvent one by one: 50% PEG300 >> 50% saline Solubility: 8.33 mg/mL (16.85 mM); Suspended solution; Need ultrasonic					
	2. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: 1.25 mg/mL (2.53 mM); Suspended solution; Need ultrasonic					

BIOLOGICAL ACTIV	
Description	Bioymifi (DR5 Activator), a potent TRAIL receptor DR5 activator, binds to the extracellular domain (ECD) of DR5 with a K <sub>d</sub> of 1.2 μM. Bioymifi can act as a single agent to induce DR5 clustering and aggregation, leading to apoptosis <sup>[1]</sup> .
In Vitro	Bioymifi (3-10 μM) induces caspase-8-dependent apoptosis. At a 10-μM concentration, Bioymifi induces processing of caspase-3 into smaller fragments <sup>[1]</sup> . Bioymifi induces apoptosis via death receptor DR5. Bioymifi promotes DR5 aggregation and activation. Bioymifi shares the same DR5-dependent extrinsic apoptotic pathway with TRAIL. Binding of bioymifi to DR5 recruits FADD, which in turn engages with the apical caspase-8 to form death-inducing signaling complex (DISC) Bioymifi (3-10 μM) induces caspase-8-dependent apoptosis. At a 10-μM concentration, Bioymifi induces processing of caspase-3 into smaller fragments <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Product Data Sheet

N S HN

Br—

O NH

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## REFERENCES

[1]. Wang G, et al. Small-molecule activation of the TRAIL receptor DR5 in human cancer cells. Nat Chem Biol. 2013 Feb;9(2):84-9.

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

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