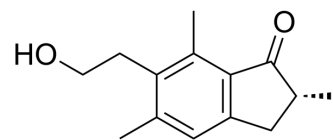


Pterosin B

Cat. No.:	HY-N1570		
CAS No.:	34175-96-7		
Molecular Formula:	C ₁₄ H ₁₈ O ₂		
Molecular Weight:	218.29		
Target:	Salt-inducible Kinase (SIK)		
Pathway:	Immunology/Inflammation		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	2 years
		-20°C	1 year



SOLVENT & SOLUBILITY

In Vitro	DMSO : 250 mg/mL (1145.27 mM; Need ultrasonic)			
		Solvent Concentration	Mass	
			1 mg	5 mg
	Preparing Stock Solutions	1 mM	4.5811 mL	22.9053 mL
		5 mM	0.9162 mL	4.5811 mL
		10 mM	0.4581 mL	2.2905 mL
	Please refer to the solubility information to select the appropriate solvent.			
In Vivo	<ol style="list-style-type: none"> Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.75 mg/mL (12.60 mM); Clear solution Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.75 mg/mL (12.60 mM); Clear solution Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.75 mg/mL (12.60 mM); Clear solution 			

BIOLOGICAL ACTIVITY

Description	Pterosin B, a indanone found in bracken fern (<i>Pteridium aquilinum</i>), is an inhibitor of salt-inducible kinase 3 (Sik3) signaling. Pterosin B prevents chondrocyte hypertrophy and osteoarthritis in mice by inhibiting Sik3 ^{[1][2]} .
IC ₅₀ & Target	SIK3

REFERENCES

[1]. Hannah R.Dexter, et al. A concise stereoselective synthesis of pterosin B. Tetrahedron Letters, Volume 59, Issue 49, 5 December 2018, Pages 4323-4325.

[2]. Yahara Y, et al. Pterosin B prevents chondrocyte hypertrophy and osteoarthritis in mice by inhibiting Sik3. Nat Commun. 2016 Mar 24;7:10959.

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

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