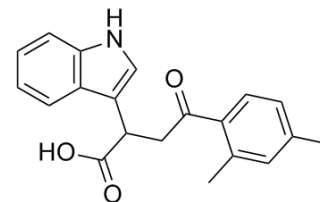


## Auxinole

Cat. No.:	HY-111444		
CAS No.:	86445-22-9		
Molecular Formula:	C <sub>20</sub> H <sub>19</sub> NO <sub>3</sub>		
Molecular Weight:	321.37		
Target:	Others		
Pathway:	Others		
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 : ≥ 250 mg/mL (777.92 mM)  
 Ethanol : 12.5 mg/mL (38.90 mM; Need ultrasonic)  
 \* "≥" means soluble, but saturation unknown.

	Solvent Concentration	Mass	1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM		3.1117 mL	15.5584 mL	31.1168 mL
	5 mM		0.6223 mL	3.1117 mL	6.2234 mL
	10 mM		0.3112 mL	1.5558 mL	3.1117 mL

Please refer to the solubility information to select the appropriate solvent.

### BIOLOGICAL ACTIVITY

Description	Auxinole is a potent auxin antagonist of <b>TIR1/AFB receptors</b> , binding TIR1 to block the formation of the TIR1-IAA-Aux/IAA complex and so inhibits auxin-responsive gene expression.
IC <sub>50</sub> & Target	TIR1/AFB receptor <sup>[1]</sup>
In Vitro	Auxinole is a potent auxin antagonist of TIR1/AFB receptors, and binds TIR1 to block the formation of the TIR1-IAA-Aux/IAA complex and then inhibits auxin-responsive gene expression. In addition, Auxinole competitively inhibits various auxin responses in planta <sup>[1]</sup> . Auxinole causes reduction in IAA-triggered depolarization in root hair cells. Auxinole (20 μM) also represses the transient increase in [Ca <sup>2+</sup> ] <sub>cyt</sub> completely, and blocks Ca <sup>2+</sup> response <sup>[2]</sup> .

### REFERENCES

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[1]. Hayashi K, et al. Rational design of an auxin antagonist of the SCF(TIR1) auxin receptor complex. ACS Chem Biol. 2012 Mar 16;7(3):590-8.

[2]. Dindas J, et al. AUX1-mediated root hair auxin influx governs SCFTIR1/AFB-type Ca<sup>2+</sup> signaling. Nat Commun. 2018 Mar 21;9(1):1174.

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

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