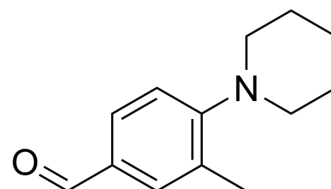


## ALDH1A3-IN-2

Cat. No.:	HY-144669		
CAS No.:	886502-08-5		
Molecular Formula:	C <sub>13</sub> H <sub>17</sub> NO		
Molecular Weight:	203.28		
Target:	Aldehyde Dehydrogenase (ALDH)		
Pathway:	Metabolic Enzyme/Protease		
Storage:	Pure form	-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 (491.93 mM; Need ultrasonic)					
		Solvent Concentration	Mass	1 mg	5 mg	10 mg
	Preparing Stock Solutions	1 mM		4.9193 mL	24.5966 mL	49.1932 mL
		5 mM		0.9839 mL	4.9193 mL	9.8386 mL
10 mM			0.4919 mL	2.4597 mL	4.9193 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 (12.30 mM); Clear solution					
	2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (12.30 mM); Clear solution					
	3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (12.30 mM); Clear solution					

### BIOLOGICAL ACTIVITY

Description	ALDH1A3-IN-2 (Compound 15) is a potent inhibitor of ALDH1A3 with an IC <sub>50</sub> of 1.29 μM. Aldehyde dehydrogenases (ALDHs) are overexpressed in various tumor types including prostate cancer. ALDH1A3-IN-2 has the potential for the research of cancer diseases <sup>[1]</sup> .
IC <sub>50</sub> & Target	ALDH1

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## REFERENCES

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[1]. Ibrahim AIM, et al. Expansion of the 4-(Diethylamino)benzaldehyde Scaffold to Explore the Impact on Aldehyde Dehydrogenase Activity and Antiproliferative Activity in Prostate Cancer. J Med Chem. 2022 Mar 10;65(5):3833-3848.

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

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