# YG1702

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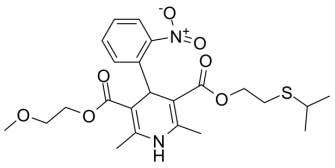
| **Cat. No.:** | HY-156443 |
| **CAS No.:** | 724737-08-0 |
| **Molecular Formula:** | $C_{23}H_{30}N_2O_7S$ |
| **Molecular Weight:** | 478.56 |
| **Target:** | Aldehyde Dehydrogenase (ALDH) |
| **Pathway:** | Metabolic Enzyme/Protease |
| **Storage:** | Powder -20°C 3 years<br>In solvent -80°C 6 months<br>-20°C 1 month |



## SOLVENT & SOLUBILITY

**In Vitro**

DMSO : 100 mg/mL (208.96 mM; Need ultrasonic)

| Preparing Stock Solutions | Mass / Solvent / Concentration | 1 mg | 5 mg | 10 mg |
|---|---|---|---|---|
| | 1 mM | 2.0896 mL | 10.4480 mL | 20.8960 mL |
| | 5 mM | 0.4179 mL | 2.0896 mL | 4.1792 mL |
| | 10 mM | 0.2090 mL | 1.0448 mL | 2.0896 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 (5.22 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (5.22 mM); Clear solution

## BIOLOGICAL ACTIVITY

**Description**

YG1702 is a potent ALDH18A1-specific inhibitor. YG1702 attenuates the growth of MYCN-amplified NB and down-regulates MYCN. YG1702 physically interacts with ALDH18A1 with a high affinity and might potentially affect its enzymatic activity[1].

**In Vivo**

YG1702 (intraperitoneal injection (I.P.), 45 mg/kg, once every 3 days, three times) inhibits the growth of the xenografts in tumor-bearing mice[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

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| Animal Model: | NOD/SCID mice (5-6-week-old female)[1] |
| Dosage: | 45 mg/kg |

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| Administration: | Intraperitoneal injection (I.P.), once every 3 days, three times |
| Result: | Inhibited the growth of the xenografts in tumor-bearing mice. |

## REFERENCES

[1]. Guo YF, et al. Inhibition of the ALDH18A1-MYCN positive feedback loop attenuates MYCN-amplified neuroblastoma growth. Sci Transl Med. 2020 Feb 19;12(531):eaax8694.



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