# KAT modulator-1

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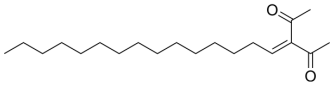
|---|---|
| **Cat. No.:** | HY-153768 |
| **CAS No.:** | 1314006-43-3 |
| **Molecular Formula:** | $C_{20}H_{36}O_2$ |
| **Molecular Weight:** | 308.5 |
| **Target:** | Histone Acetyltransferase |
| **Pathway:** | Epigenetics |
| **Storage:** | Powder -20°C 3 years<br>4°C 2 years<br>In solvent -80°C 6 months<br>-20°C 1 month |



## SOLVENT & SOLUBILITY

**In Vitro**

DMSO : 100 mg/mL (324.15 mM; ultrasonic and warming and heat to 80°C)

**Preparing Stock Solutions**

| Solvent / Mass / Concentration | 1 mg | 5 mg | 10 mg |
|---|---|---|---|
| 1 mM | 3.2415 mL | 16.2075 mL | 32.4149 mL |
| 5 mM | 0.6483 mL | 3.2415 mL | 6.4830 mL |
| 10 mM | 0.3241 mL | 1.6207 mL | 3.2415 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 (8.10 mM); Clear solution; Need ultrasonic
2. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: 2.5 mg/mL (8.10 mM); Clear solution; Need ultrasonic

## BIOLOGICAL ACTIVITY

**Description**

KAT modulator-1 (Compound 3) is a KAT modulator. KAT modulator-1 can interact with p300 full-length but not with the catalytic domain. KAT modulator-1 can be used for epigenetics research[1].

**In Vitro**

KAT modulator-1 (Compound 3) (50 μM) inhibits recombinant acetyltransferase enzymes KAT3A by 79-83%[1].
KAT modulator-1 (15 and 30 μM) reduces H3 acetylation in histone extracts of U937 leukemia cells[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

## REFERENCES

[1]. Milite C, et al. Modulation of the activity of histone acetyltransferases by long chain alkylidenemalonates (LoCAMs). Bioorg Med Chem. 2011 Jun 15;19(12):3690-701.



Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA