# Alkynyl Palmitic Acid

**Cat. No.:** HY-W040304

**CAS No.:** 99208-90-9

**Molecular Formula:** $C_{16}H_{28}O_2$

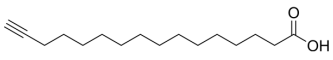
**Molecular Weight:** 252.39

**Target:** PROTAC Linkers

**Pathway:** PROTAC

**Storage:**

| | | |
|---|---|---|
| Powder | -20°C | 3 years |
| In solvent | -80°C | 6 months |
| | -20°C | 1 month |




## SOLVENT & SOLUBILITY

**In Vitro**

DMSO : 100 mg/mL (396.21 mM; Need ultrasonic)

| Preparing Stock Solutions | Mass / Solvent / Concentration | 1 mg | 5 mg | 10 mg |
|---|---|---|---|---|
| | 1 mM | 3.9621 mL | 19.8106 mL | 39.6212 mL |
| | 5 mM | 0.7924 mL | 3.9621 mL | 7.9242 mL |
| | 10 mM | 0.3962 mL | 1.9811 mL | 3.9621 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 (9.91 mM); Suspended solution; Need ultrasonic
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: 2.5 mg/mL (9.91 mM); Suspended solution; Need ultrasonic
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (9.91 mM); Clear solution

## BIOLOGICAL ACTIVITY

**Description**

Alkynyl Palmitic Acid (Alk-C16) is an alkyl chain-based PROTAC linker that can be used in the synthesis of PROTACs[1]. Alkynyl Palmitic Acid is a click chemistry reagent, it contains an Alkyne group and can undergo copper-catalyzed azide-alkyne cycloaddition (CuAAc) with molecules containing Azide groups.

**$IC_{50}$ & Target**

Alkyl-Chain

**In Vitro**

PROTACs contain two different ligands connected by a linker; one is a ligand for an E3 ubiquitin ligase and the other is for the target protein. PROTACs exploit the intracellular ubiquitin-proteasome system to selectively degrade target proteins[1].

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

## REFERENCES

[1]. An S, et al. Small-molecule PROTACs: An emerging and promising approach for the development of targeted therapy drugs. EBioMedicine. 2018 Oct;36:553-562



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