Proteins

## **Product** Data Sheet

## bio-THZ1

Cat. No.: HY-128867 CAS No.: 1604811-14-4 Molecular Formula:  $C_{52}H_{65}CIN_{12}O_8S$ 

Molecular Weight: 1053.67 CDK Target:

Pathway: Cell Cycle/DNA Damage

Storage: Powder -20°C 3 years

2 years

-80°C In solvent 6 months

> -20°C 1 month

#### **SOLVENT & SOLUBILITY**

In Vitro

DMSO: 120 mg/mL (113.89 mM; Need ultrasonic)

| Preparing<br>Stock Solutions | Solvent Mass<br>Concentration | 1 mg      | 5 mg      | 10 mg     |
|------------------------------|-------------------------------|-----------|-----------|-----------|
|                              | 1 mM                          | 0.9491 mL | 4.7453 mL | 9.4906 mL |
|                              | 5 mM                          | 0.1898 mL | 0.9491 mL | 1.8981 mL |
|                              | 10 mM                         | 0.0949 mL | 0.4745 mL | 0.9491 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: ≥ 6 mg/mL (5.69 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: 6 mg/mL (5.69 mM); Suspended solution; Need ultrasonic
- 3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 6 mg/mL (5.69 mM); Clear solution

### **BIOLOGICAL ACTIVITY**

 $CDK7^{[1]}$ .

| Description | bio-THZ1 is a biotinylated version of THZ1 and binds irreversibly to CDK7. THZ1 is a selective and potent covalent CDK7 |
|-------------|---|
|             | inhibitor with an IC $_{50}$ of 3.2 nM $^{[1]}$ .   |
|             |   |

# **REFERENCES**

IC<sub>50</sub> & Target

| 1]. Kwiatkowski N, et al. Targeting | transcription regulation in ca      | ncer with a covalent CDK7 inhib                    | itor. Nature. 2014 Jul 31;511(7511):616-2                   | 0.  |
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| (                                   | Caution: Product has not be         | een fully validated for medic                      | al applications. For research use on                        | ly. |
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