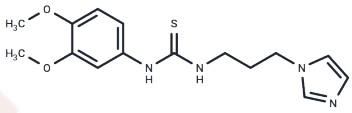
# Data Sheet (Cat.No.T7905)

TargetMol

PBD-150

## Chemical Properties



CAS No. : 790663-33-1

Formula: C15H20N4O2S

Molecular Weight: 320.41

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

## Biological Description

| | |
|---|---|
| Description | PBD-150 is an inhibitor of human glutaminyl cyclase (hQC) Y115E-Y117E variant( ki : 490 nM) |
| Targets(IC50) | Beta Amyloid,Glutaminyl Cyclase |
| In vivo | A glutaminyl cyclase (QC) inhibitor, PBD150, was shown to be able to reduce the deposition of pyroglutamate-modified amyloid-β peptides in brain of transgenic mouse models of Alzheimer disease, leading to a significant improvement of learning and memory in those transgenic animals[1]. |

## Solubility Information

| | |
|---|---|
| Solubility | DMSO: 125 mg/mL (390.13 mM),Sonication is recommended.<br>(< 1 mg/ml refers to the product slightly soluble or insoluble) |
| In vivo Formulation | 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 4 mg/mL (12.48 mM),Sonication is recommended.<br>*Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.* |

Preparing Stock Solutions

| | 1mg | 5mg | 10mg |
|---|---|---|---|
| 1 mM | 3.121 mL | 15.605 mL | 31.210 mL |
| 5 mM | 0.6242 mL | 3.121 mL | 6.242 mL |
| 10 mM | 0.3121 mL | 1.5605 mL | 3.121 mL |
| 50 mM | 0.0624 mL | 0.3121 mL | 0.6242 mL |

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Huang, K.-F, Liaw, S.-S, Huang, W.-L,et al. Structures of Human Golgi-resident Glutaminyl Cyclase and Its Complexes with Inhibitors Reveal a Large Loop Movement upon Inhibitor Binding[J]. Journal of Biological Chemistry, 286(14):12439-12449.

Dipisa F , Pozzi C , Benvenuti M , et al. The soluble Y115E-Y117E variant of human glutaminyl cyclase is a valid target for X-ray and NMR screening of inhibitors against Alzheimer disease[J]. Acta Crystallographica, 2015, 71(8): 986-992.