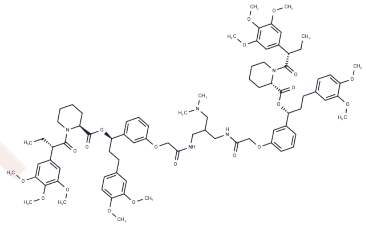
# Data Sheet (Cat.No.T14299)

TargetMol

AP20187

## Chemical Properties



CAS No. : 195514-80-8

Formula: C82H107N5O20

Molecular Weight: 1482.75

Storage: Store at low temperature,Keep away from direct sunlight
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 | AP20187 (B/B Homodimerizer) is a cell-permeable compound used to dimerize FK506-binding protein (FKBP) fusion proteins, thereby initiating biological signaling cascades, gene expression, or disrupting protein-protein interactions. |
| Targets(IC50) | Others,FKBP |
| In vitro | Treatment of LNCaP cells with AP20187 (B/B Homodimerizer) at a concentration of 100 nM significantly reduces ro-iCaspase-9 levels, while the smaller, processed, active form of caspase-9 becomes evident. |
| In vivo | Treatment with AP20187 significantly mitigates the effects of experimental autoimmune encephalomyelitis (EAE) on myelin sheaths in mice, markedly decreasing the prevalence of deteriorating axons and enhancing axonal density within demyelination sites in the lumbar spinal cord of PLP/Fv2E-PERK mice. Additionally, real-time PCR analysis reveals that AP20187 (B/B Homodimerizer) administration at doses of 0.5 mg/kg, 2 mg/kg, or 5 mg/kg notably elevates CHOP mRNA levels in the central nervous system (CNS) of PLP/Fv2E-PERK mice at post-infection day (PID) 12. |

## Solubility Information

| | |
|---|---|
| Solubility | DMSO: 50 mg/mL (33.72 mM),Sonication is recommended.<br>Ethanol: 130 mg/mL (87.67 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: 2 mg/mL (1.35 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 | 0.6744 mL | 3.3721 mL | 6.7442 mL |
| 5 mM | 0.1349 mL | 0.6744 mL | 1.3488 mL |
| 10 mM | 0.0674 mL | 0.3372 mL | 0.6744 mL |
| 50 mM | 0.0135 mL | 0.0674 mL | 0.1349 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

Ahmed S, et al. Photocleavable dimerizer for the rapid reversal of molecular trap antagonists. J Biol Chem. 2014 Feb 21;289(8):4546-52.
Lin W, et al. Oligodendrocyte-specific activation of PERK signaling protects mice against experimental autoimmune encephalomyelitis. J Neurosci. 2013 Apr 3;33(14):5980-91.
Haas ME, et al. The Role of Proprotein Convertase Subtilisin/Kexin Type 9 in Nephrotic Syndrome-Associated Hypercholesterolemia. Circulation. 2016 Jul 5;134(1):61-72.



Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481