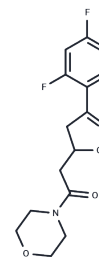


(±)-CPSI-1306

Chemical Properties

CAS No. : 1309793-47-2
 Formula: C₁₅H₁₆F₂N₂O₃
 Molecular Weight: 310.3
 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 | (±)-CPSI-1306 (2-(3-(2,4-Difluorophenyl)-4,5-dihydroisoxazol-5-yl)-1-morpholinoethan-1-one) is a macrophage migration inhibitory factor (MIF) antagonist and can be used in studies about non-insulin-dependent diabetes mellitus (NIDDM) and the prevention of the deleterious cutaneous effects of acute and chronic UVB exposure. |
| Targets(IC50) | Others,MIF |
| In vivo | In mice, (±)-CPSI-1306 decreases their blood glucose levels and can be effective in treating non-insulin-dependent diabetes mellitus (NIDDM) as characterized by high serum levels of glucose and inflammatory cytokine[1]. (±)-CPSI-1306-induced keratinocyte apoptosis is appreciated 30 minutes after a single UVB exposure. (±)-CPSI-1306-treated mice show a significant increase in expression of cleaved caspase-3 at 6, 24, and 48 hours following UVB exposure. (±)-CPSI-1306 reduces acute UVB-induced keratinocyte DNA damage and UVB-induced acute inflammation[2]. |

Solubility Information

| | |
|---------------------|--|
| Solubility | DMSO: 45 mg/mL (145.02 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble) |
| In vivo Formulation | 10% DMSO+40% PEG300+5% Tween-80+45% Saline: 1 mg/mL (3.22 mM),Sonication is recommended. <i>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.</i> |

Preparing Stock Solutions

| | 1mg | 5mg | 10mg |
|-------|-----------|------------|------------|
| 1 mM | 3.2227 mL | 16.1134 mL | 32.2269 mL |
| 5 mM | 0.6445 mL | 3.2227 mL | 6.4454 mL |
| 10 mM | 0.3223 mL | 1.6113 mL | 3.2227 mL |
| 50 mM | 0.0645 mL | 0.3223 mL | 0.6445 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

Sanchez-Zamora Y, et al. Macrophage migration inhibitory factor is a therapeutic target in treatment of non-insulin-dependent diabetes mellitus. *FASEB J.* 2010 Jul;24(7):2583-90.

Nagarajan P, et al. MIF antagonist (CPSI-1306) protects against UVB-induced squamous cell carcinoma. *Mol Cancer Res.* 2014 Sep;12(9):1292-302.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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