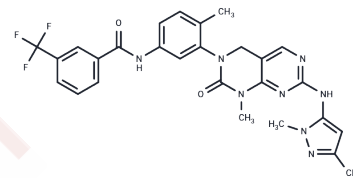


Pluripotin

Chemical Properties

| | |
|-------------------|---|
| CAS No. : | 839707-37-8 |
| Formula: | C ₂₇ H ₂₅ F ₃ N ₈ O ₂ |
| Molecular Weight: | 550.53 |
| 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 | Pluripotin (SC1) (SC1), which keep embryonic stem cell (ESC) self-renewal, is a dual inhibitor of extracellular signal-regulated kinase 1 (ERK1, MAPK3) and RasGAP. |
| Targets(IC50) | ERK,Raf,S6 Kinase |
| In vitro | Pluripotin is a dual function small molecule inhibitor of both ERK1 and RasGAP and that simultaneous inhibition of both protein activities is required and sufficient for Pluripotin's effects on mES cells. Pluripotin activates Ras by inhibition of RasGAP function [1]. Pluripotin improved the derivation efficiency and pluripotency of ES cells from C57BL/6. Three types of pluripotent stem cells (fES, ntES, and iPS cells) of the C57BL/6 background could generate full-term pups with high efficiency when cultured with Pluripotin[1]. |

Solubility Information

| | |
|---------------------|--|
| Solubility | DMSO: 13.8 mg/mL (25.07 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: 2 mg/mL (3.63 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 | 1.8164 mL | 9.0822 mL | 18.1643 mL |
| 5 mM | 0.3633 mL | 1.8164 mL | 3.6329 mL |
| 10 mM | 0.1816 mL | 0.9082 mL | 1.8164 mL |
| 50 mM | 0.0363 mL | 0.1816 mL | 0.3633 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

Chen S, et al. Proc Natl Acad Sci U S A. 2006, 103(46):17266-17271.

Lin CJ, et al. PLoS One. 2014, 9(9):e106916.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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