Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

PFI-3

Catalog No: tcsc3455

Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Specifications

CAS No:
1819363-80-8

Formula:
$C_{19}H_{19}N_3O_2$

Pathway:
Epigenetics

Target:
Epigenetic Reader Domain

Purity / Grade:
>98%

Solubility:
DMSO : 135 mg/mL (420.08 mM; Need ultrasonic)

Observed Molecular Weight:
321.37

Product Description

PFI-3 is a selective, potent and cell-permeable **SMARCA2/4** bromodomain inhibitor with a $\mathbf{K_d}$ of 89 nM.

IC50 & Target: Kd: 89 nM (SMARCA2/4)[1]

In Vitro:

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PFI-3 is a potent, cell-permeable probe capable of displacing ectopically expressed, GFP-tagged SMARCA2-bromodomain from chromatin. PFI-3 binds avidly to both SMARCA2 and SMARCA4 bromodomains (BROMOScan K_d\'s between 55 and 110 nM) consistent with the binding constant (K_d=89 nM) measured by isothermal titration calorimetry. PFI-3 does not phenocopy the growth inhibitory effects of SMARCA2 knockdown in lung cancer[1]. Exposure of embryonic stem cells to PFI-3 leads to deprivation of stemness and deregulates lineage specification. Furthermore, differentiation of trophoblast stem cells in the presence of PFI-3 is markedly enhanced[2]. PFI-3 binds to certain family VIII bromodomains while displaying significant, broader bromodomain family selectivity. The high specificity of PFI-3 for family VIII is achieved through a novel bromodomain binding mode of a phenolic headgroup that leads to the unusual displacement of water molecules that are generally retained by most other bromodomain inhibitors reported to date[3].