

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

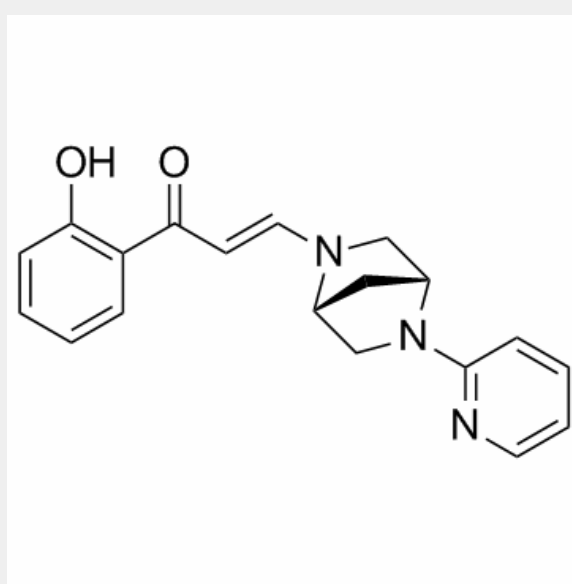
Product Description

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

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

In Vitro:

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].



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!