

产品名称 : BAY 2402234

同义词 : BAY2402234 | BAY-2402234

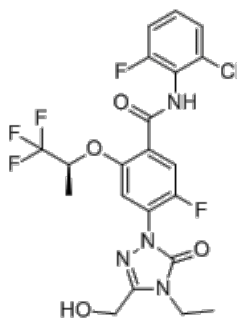
产品货号 : M13555

CAS Number : 2225819-06-5

分子式 : C<sub>21</sub>H<sub>18</sub>ClF<sub>5</sub>N<sub>4</sub>O<sub>4</sub>

分子量 : 520.841

化学全名 : (S)-N-(2-chloro-6-fluorophenyl)-4-(4-ethyl-3-(hydroxymethyl)-5-oxo-4,5-dihydro-1H-1,2,4-triazol-1-yl)-5-fluoro-2-((1,1,1-trifluoropropan-2-yl)oxy)benzamide



**产品描述** : BAY 2402234 (BAY2402234) is a novel potent, selective, orally bioavailable DHODH inhibitor with IC<sub>50</sub> of 1.2 nM (human full-length DHODH); binds the ubiquinone binding site of DHODH between the N-terminal helices; causes dose-dependent upregulation of CD11b with EC<sub>50</sub>s of 3.16 nM in MOLM-13 cells and 0.96 nM in HEL cells, inhibits the proliferation of THP-1 cells with an IC<sub>50</sub> of 2.6 nM, as well as nine other leukemia cell lines representing diverse AML subtypes (IC<sub>50</sub>=0.08-8.2 nM); BAY 2402234 shows monotherapy efficacy and differentiation induction across multiple AML subtypes both in vitro and in vivo. Blood Cancer Phase 1 Clinical (In Vitro): BAY-2402234 is a selective low-nanomolar inhibitor of human DHODH enzymatic activity. In vitro, it potently inhibits proliferation of AML cell lines in the sub-nanomolar to low-nanomolar range. BAY-2402234 induces differentiation of AML cell lines also in a sub-nanomolar to low-nanomolar range, demonstrating the anticipated mode of action in cellular mechanistic assays. (In Vivo): BAY-2402234 exhibits strong in vivo anti-tumor efficacy in monotherapy in several subcutaneous and disseminated AML xenografts as well as AML patient-derived xenograft (PDX) models. Target engagement of the novel DHODH inhibitor BAY-2402234 can be observed by increase of tumoral and plasma dihydroorotate levels after treatment with the inhibitor. Consistent with the in vitro data BAY-2402234 induces AML differentiation in vivo as detected by upregulation of differentiation cell surface markers in xenograft and PDX models after treatment with the inhibitor. Furthermore, differentiation-associated transcriptomic changes are evident following a single administration of BAY-2402234 in vivo.

**通路** : Others

**靶点** : Other Targets

**受体** : Other Targets

**溶解度** : DMSO : 125 mg/mL 240.00 mM

**SMILES** : FC1=C(NC(C2=CC(F)=C(N3N=C(CO)N(CC)C3=O)C=C2O[C@@H](C)C(F)(F)F)=O)C(Cl)=CC=C1

**存储条件** : (-20°C)

**稳定性** : ≥ 2 years

**参考文献** :

1. Christian S, et al. Leukemia. 2019 Apr 2. doi: 10.1038/s41375-019-0461-5.