

Product Name : G-749

Synonyms : alpha-MCPG

**Cat No.** : M17310

**CAS Number** : 1457983-28-6

Molecular Formula : C25H25BrN6O2

Formula Weight : 521.41

Description

Chemical Name : 8-bromo-2-((1-methylpiperidin-4-yl)amino)-4-((4-phenoxyphenyl)amino)pyrido[4,3-d]pyrimidin-5(6H)-one

G-749 is a novel FLT3 inhibitor that showed potent and sustained inhibition of the FLT3 wild type and mutants including FLT3-ITD, FLT3-ID835Y, FLT3-ITD/N676D, and FLT3-ITD/F691L in cellular assays. G-749 retained its inhibitory potency in various drug-resistance milieus such as patient plasma, FLT3 ligand surge, and stromal protection. Furthermore, it

displayed potent antileukemic activity in bone marrow blasts from AML patients regardless of FLT3 mutation status, including those with little or only minor responses to AC220 or PKC412. Oral administration of G-749 yielded complete tumor regression and increased life span in animal models. Thus, G-749 appears to be a promising next-generation drug candidate for the treatment of relapsed and refractory AML patients with various FLT3-ITD/FLT3-TKD mutants and further

shows the ability to overcome drug resistance.

Pathway : Metabolic Enzyme/Protease

Target : Dehydrogenase

Receptor : Aurora B; RET; FLT3; FLT3 (D835Y); Mer

**Solubility** : DMSO : 25 mg/mL; 47.95 mM;

SMILES : CN1CCC(CC1)NC1=NC2=C(C(=0)NC=C2Br)C(NC2=CC=C(OC3=CC=CC3)C=C2)=N1

**Storage** : (-20°C)

Stability : ≥ 2 years

Reference :

1. Lee HK, et al. Blood. 2014, 123(14), 2209-2219.