

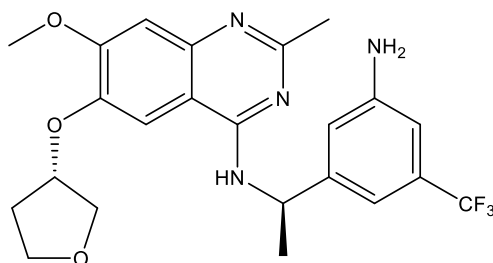
Catalog #10-3956

BI-3406

CAS# 2230836-55-0

N-[(1R)-1-[3-Amino-5-(trifluoromethyl)phenyl]ethyl]-7-methoxy-2-methyl-6-[(3S)-oxolan-3-yl]oxyquinazolin-4-amine

Lot # FBS4047



BI-3406 is a potent ($IC_{50} = 5 \text{ nM}$), selective, and orally bioavailable SOS1 inhibitor.¹ It blocks SOS1 interaction with KRAS preventing activation of KRAS. BI-3406 was active against multiple cancer cell types and xenograft models harboring various KRAS mutant alleles including G12C, V, S, A, and G13D. It displayed strong synergistic effects with the MEK inhibitor trametinib^{1,2} and this combination was able to overcome resistance to the KRAS inhibitors sotorasib and adagrasib³. BI-3406 acted synergistically with the KRAS inhibitor adagrasib in KRAS G12C mutant lung and colorectal cancer models.⁴

- 1) Hofmann *et al.* (2020), *BI-3406, a potent and selective SOS1::KRAS interaction inhibitor, is effective in KRAS-driven cancers through combined MEK inhibition*; *Cancer Discov.* **11** 142
- 2) Ma *et al.* (2022), *Inhibition of KRAS, MEK and PI3K Demonstrate Synergistic Anti-Tumor Effects in Pancreatic Ductal Adenocarcinoma Cell Lines*; *Cancers (Basel)* **14** 4467
- 3) Koga *et al.* (2021), *KRAS Secondary Mutations That Confer Acquired Resistance to KRAS G12C Inhibitors, Sotorasib and adagrasib, and Overcoming Strategies: Insights From In Vitro Experiments*; *J. Thorac. Oncol.* **16** 1321
- 4) Thatikonda *et al.* (2024), *Co-targeting SOS1 enhances the antitumor effects of KRAS^{G12C} inhibitors by addressing intrinsic and acquired resistance*; *Nat. Cancer* **5** 1352

PHYSICAL DATA

Molecular Weight:	462.47
Molecular Formula:	C ₂₃ H ₂₅ F ₃ N ₄ O ₃
Purity:	>98% (HPLC)
	NMR: (Conforms)
Solubility:	DMSO (>70 mg/mL)
Physical Description:	White solid
Storage and Stability:	Store as supplied at -20°C for up to 2 years from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 3 months.

Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.

Focus Biomolecules LLC 400 Davis Drive, Suite 600 Plymouth Meeting PA 19462

www.focusbiomolecules.com