

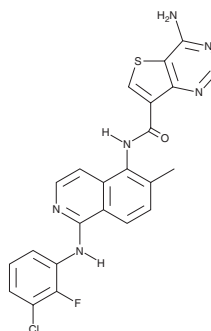
PRODUCT INFORMATION



Belvarafenib

Item No. 31460

CAS Registry No.: 1446113-23-0
Formal Name: 4-amino-N-[1-[(3-chloro-2-fluorophenyl)amino]-6-methyl-5-isoquinolinyl]-thieno[3,2-d]pyrimidine-7-carboxamide
Synonyms: GDC-5573, HM95573
MF: C₂₃H₁₆ClFN₆OS
FW: 478.9
Purity: ≥98%
UV/Vis.: λ_{max}: 215, 316 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Belvarafenib is supplied as a crystalline solid. A stock solution may be made by dissolving the belvarafenib in the solvent of choice, which should be purged with an inert gas. Belvarafenib is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of belvarafenib in these solvents is approximately 30 mg/ml.

Belvarafenib is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, belvarafenib should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Belvarafenib has a solubility of approximately 0.33 mg/ml in a 1:2 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Belvarafenib is an inhibitor of B-RAF and C-RAF (IC₅₀s = 41, 7, and 2 nM for wild-type B-RAF, B-RAF^{V600E}, and wild-type C-RAF, respectively).¹ It is cytotoxic to B-RAF^{V600E}-expressing A375 and SK-MEL-28 melanoma cells (IC₅₀s = 57 and 69 nM, respectively), as well as COLO 205 and HCT116 colon and B-CPAP and CAL-62 thyroid cancer cells (IC₅₀s = 116, 65, 43, and 479 nM, respectively). Belvarafenib reduces tumor growth in A375, SK-MEL-28, SK-MEL-2, and SK-MEL-30 mouse xenograft models.

Reference

1. Man, R.-J., Zhang, Y.-L., Jiang, A.-Q., *et al.* A patent review of RAF kinase inhibitors (2010-2018). *Expert Opin. Ther. Pat.* **29**(9), 675-688 (2019).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

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