

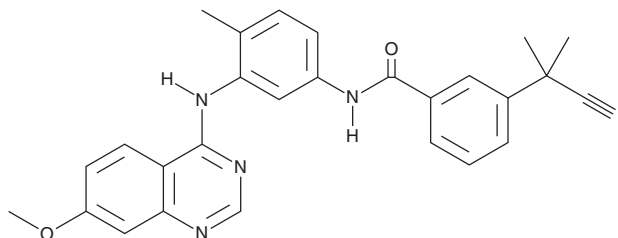
PRODUCT INFORMATION



AZ 304

Item No. 37580

CAS Registry No.: 942507-42-8
Formal Name: 3-(1-cyano-1-methylethyl)-N-[3-[(7-methoxy-4-quinazoliny)amino]-4-methylphenyl]-benzamide
MF: C₂₇H₂₅N₅O₂
FW: 451.5
Purity: ≥95%
Supplied as: A 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

AZ 304 is supplied as a solid. A stock solution may be made by dissolving the AZ 304 in the solvent of choice, which should be purged with an inert gas. AZ 304 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of AZ 304 in ethanol is approximately 10 mg/ml and approximately 20 mg/ml in DMSO and DMF.

Description

AZ 304 is an inhibitor of B-RAF and B-RAF containing a valine-to-glutamate substitution at position 600 (B-RAF^{V600E}; IC₅₀s = 79 and 38 nM, respectively).¹ It is selective for B-RAF and B-RAF^{V600E} over MAP3K7 and C-terminal Src kinase (CSK) (IC₅₀s = 6,400 and 7,050 nM, respectively), as well as insulin-like growth factor 1 receptor (IGF-1R), EGFR, cyclin-dependent kinase 2 (Cdk2), Cdk4, JAK2, and c-Src (IC₅₀s = >10,000 nM for all), but also inhibits p38 MAPK, CSF-1 receptor tyrosine kinase (FMS), and C-RAF (IC₅₀s = 6, 35, and 79 nM, respectively). AZ 304 (10 and 100 μM) reduces the proliferation of RKO, HT-29, DiFi, and Caco-2 colon cancer cells. *In vivo*, AZ 304 (10 mg/kg twice daily), alone or in combination with the anti-EGFR antibody cetuximab, reduces tumor volume in RKO and Caco-2 colon cancer mouse xenograft models.

Reference

1. Ma, R., Xu, L., Qu, X., *et al.* AZ304, a novel dual BRAF inhibitor, exerts anti-tumour effects in colorectal cancer independently of BRAF genetic status. *Br. J. Cancer* **118**(11), 1453-1463 (2018).

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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