

PRODUCT INFORMATION

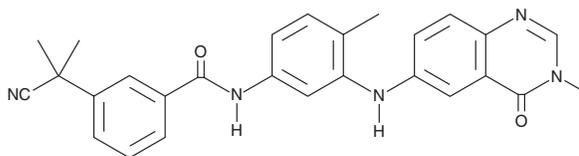


AZ 628

Item No. 15336

CAS Registry No.: 878739-06-1
Formal Name: 3-(1-cyano-1-methylethyl)-N-[3-[(3,4-dihydro-3-methyl-4-oxo-6-quinazolinyl)amino]-4-methylphenyl]-benzamide

MF: C₂₇H₂₅N₅O₂
FW: 451.5
Purity: ≥98%
UV/Vis.: λ_{max}: 220, 225, 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

AZ 628 is supplied as a crystalline solid. A stock solution may be made by dissolving the AZ 628 in the solvent of choice, which should be purged with an inert gas. AZ 628 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of AZ 628 in these solvents is approximately 0.25, 30, and 25 mg/ml, respectively.

AZ 628 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, AZ 628 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. AZ 628 has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

The Raf kinases activate cellular pathways that lead to cell proliferation and can contribute to certain types of cancer.^{1,2} Mutations in the kinase B-Raf are involved in a wide range of cancers.^{3,4} In particular, the mutation B-Raf^{V600E} occurs in melanomas and other types of cancer but is poorly targeted by many inhibitors of wild type B-Raf.^{5,6} AZ 628 is a quinazolinone that inhibits several Raf kinases, including B-Raf, B-Raf^{V600E}, and c-Raf-1 (IC₅₀s = 105, 34, and 29 nM in *in vitro* kinase assays).^{7,8} It also prevents activation of several tyrosine kinases, including VEGFR2, DDR2, Lyn, FLT1, and FMS.⁷ In colon and melanoma cell lines carrying B-Raf^{V600E} mutations, AZ 628 is reported to inhibit anchorage-dependent and -independent growth, induce cell cycle arrest, and cause apoptosis.⁷

References

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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.

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