

Product Specification Sheet

Product Name: AZ-628

Catalog Number: C2962

Technical information:

Chemical Formula: $C_{27}H_{25}N_5O_2$

CAS #: 878739-06-1

Molecular Weight: 451.52

Purity: > 99%

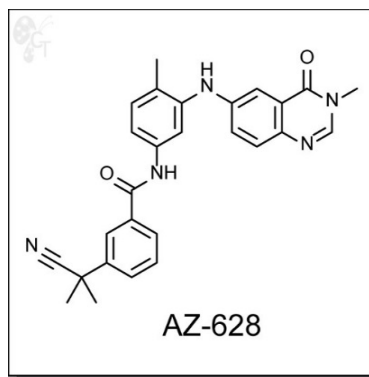
Appearance: White solid

Solubility: Soluble in DMSO up to 22 mM

Chemical Name: 3-(2-cyanopropan-2-yl)-N-(4-methyl-3-(3-methyl-4-oxo-3,4-dihydroquinazolin-6-ylamino)phenyl)benzamide

Storage: Store solid powder at 4°C desiccated; Store DMSO solution at -20°C.

Shelf Life: In the unopened package, powder is stable for 1 year and DMSO solution is stable for 6 months under proper storage condition.



- Handling:**
- To make 10 mM stock solution, add 0.221 mL of DMSO for each mg of AZ-628
 - For DMSO solution, briefly spin the vial at 500 rpm in a 50 mL conical tube to ensure maximum sample recovery.

Biological Activity: AZ628 is a quinazolinone-based pan-Raf kinase inhibitor with IC₅₀ values of 105, 34, and 29 nM for b-Raf, bRafV600E, and c-Raf-1, respectively. [1] It is selective over a wide panel of RTKs, including VEGFR2, DDR2, Lyn, Flt1, and FMS. AZ628 inhibits anchorage-dependent and -independent growth, causes cell cycle arrest, and induces apoptosis in colon and melanoma cell lines with the b-RafV600E mutation. Cross-reactivity profiles of AZ628 indicate similarities to sorafenib.

Typically AZ628-sensitive lines are often characterized by b-RAFV600E or NRAS mutations, while HRAS or KRAS mutations were not normally observed. AZ628 sensitivity is correlated with its ability to suppress downstream ERK. [2]

- Reference:**
1. Khazak et al., Selective Raf inhibition in cancer therapy. *Expert Opin. Ther. Targets*, 2007, 11(12), 1587-1609. Pubmed ID: 18020980
 2. McDermott et al., Identification of genotype-correlated sensitivity to selective kinase inhibitors by using high-throughput tumor cell line profiling. *Proc. Natl. Acad. Sci.* 104(50), 19936-19941. Pubmed ID: 18077425

To reorder: <http://www.cellagentech.com/AZ-628/>

For Technical Support: technical@cellagentech.com

Chemicals are sold for research use only, not for clinical or diagnostic use.