

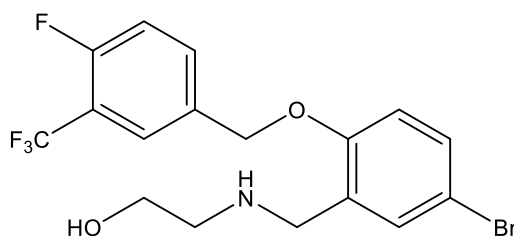
Catalog # 10-4317

AZ1

CAS# 2165322-94-9

2-[[5-Bromo-2-[[4-fluoro-3-(trifluoromethyl)phenyl]methoxy]phenyl]methylamino]ethanol

Lot # FBS4118



AZ1 is a selective dual inhibitor of the deubiquitinases USP25 and 28 (IC_{50} 's = 620 nM and 700 nM respectively).¹ It reduced c-Myc levels in HCT116, SW480, and HT29 colon cancer cell lines. AZ1 inhibited SARS-CoV-2 replication in Vero E6 cells.² It caused DNA damage, promoted c-Myc degradation, and induced apoptosis in non-small cell lung cancer cells alone and in combination with cisplatin.³ Treatment of chronic lymphocytic leukemia cells with AZ1 suppressed Notch activation and reduced cell viability in combination with venetoclax.⁴ It reduced c-Myc expression in clear cell renal cell carcinoma leading to tumor growth suppression.⁵ AZ1 ameliorated Parkinson's disease *via* USP25-dependent restoration of mitophagy.⁶

- 1) Wrigley *et al.* (2017), *Identification and Characterization of Dual Inhibitors of the USP25/28 Deubiquitinating Enzyme Subfamily*; ACS Chem. Biol., **12** 3113
- 2) Kim *et al.* (2022), *A proteome-scale map of the SARS-CoV-2-human contactome*; Nat. Biotech., **41** 140
- 3) Song *et al.* (2024), *Deubiquitinating enzyme USP28 inhibitor AZ1 alone and in combination with cisplatin for the treatment of non-small cell lung cancer*; Apoptosis, **29** 1793
- 4) Ehrmann *et al.* (2025), *NOTCH1 signaling is dysregulated by loss of the deubiquitinase USP28 with del(11q), uncovering USP28 inhibition as novel therapeutic target in CLL*; Leukemia, **39** 1892
- 5) Ren *et al.* (2026), *Targeting USP28 inhibits clear cell renal cell carcinoma growth*; Cell Signal., **139** 112344
- 6) Xu *et al.* (2026), *USP25 inhibition ameliorates Parkinson's disease by restoring mitophagy*; Proc. Natl. Acad. Sci. USA, **123** e2516471123

PHYSICAL DATA

Molecular Weight:	422.22
Molecular Formula:	C ₁₇ H ₁₆ BrF ₄ NO ₂
Purity:	>98% by HPLC
	NMR: (Conforms)
Solubility:	DMSO (18 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.

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