

Product Name	: AZD8186
Synonyms	: AZD-8186
Cat No.	: M12409
CAS Number	: 1627494-13-6
Molecular Formula	: C ₂₄ H ₂₅ F ₂ N ₃ O ₄
Formula Weight	: 457.47
Chemical Name	: 4H-1-Benzopyran-6-carboxamide, 8-[(1R)-1-[(3,5-difluorophenyl)amino]ethyl]-N,N-dimethyl-2-(4-morpholinyl)-4-oxo-
Description	AZD8186 is a potent, isoform-specific PI3Kβ inhibitor with IC₅₀ of 4 nM, also inhibits PI3Kδ (IC₅₀=12 nM) with selectivity over PI3Kα (IC₅₀=35 nM) and PI3Kγ (IC₅₀=675 nM); inhibits ADP-induced human platelet aggregation with IC₅₀ of 186 nM, shows no significant binding to 442 other kinases; inhibits PI3Kβ-dependent activation of pAKT (Ser473) in MDA-MB-468 cells (IC₅₀=3 nM), inhibits proliferation of MDA-MB-468 cells (GI₅₀=65 nM); suppresses phosphorylation of AKT, PRAS40, S6, and FOXO with IC₅₀ of <10-300 nM in breast cancer cells, also induces nuclear translocation of FOXO3a in vitro; effectively inhibits growth of prostate and TNBC tumors, both as a single agent and in combination with docetaxel. Breast Cancer Phase 1 Clinical
Pathway	: PI3K/Akt/mTOR signaling
Target	: PI3K
Receptor	: PI3K α ; PI3K β ; PI3K γ ; PI3K δ
Solubility	: DMSO: $\geq$ 35 mg/mL
SMILES	: <chem>O=C(N(C)C)C1=CC([C@@H](C)NC2=CC(F)=CC(F)=C2)=C3C(C(C=C(O3)N4CCOCC4)=O)=C1</chem>
Storage	: (-20°C)
Stability	: $\geq$ 2 years
Reference	:

1. Hancox U, et al. Mol Cancer Ther. 2015 Jan;14(1):48-58.| 2. Barlaam B, et al. J Med Chem. 2015 Jan 22;58(2):943-62.| 3. Schwartz S, et al. Cancer Cell. 2015 Jan 12;27(1):109-22.| 4. Lynch JT, et al. Clin Cancer Res. 2017 Dec 15;23(24):7584-7595.

