

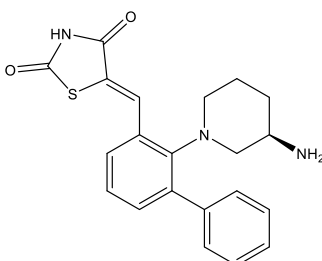
Catalog #10-4781

AZD1208

CAS# 1204144-28-4

(5Z)-5-[[2-[(3R)-3-Aminopiperidin-1-yl]-3-phenylphenyl]methylidene]-1,3-thiazolidine-2,4-dione

Lot # FBS4023



AZD1208 is a highly selective and potent pan-PIM kinase inhibitor (IC₅₀ = 3 nM PIM1; 150 nM PIM2; 9 nM PIM3).¹ Displayed efficacy in models of acute myeloid leukemia², prostate cancer³, and triple-negative breast cancer⁴. Combination treatment of AZD1208 and imatinib eliminated chronic myelogenous leukemia stem cells in cell culture and a patient-derived mouse xenograft model.⁵ It improved immunotherapeutic antitumor T-cell response⁶ and disrupted the myeloid cell-mediated immunosuppressive tumor microenvironment increasing T-cell-mediated antitumor immunity.

- 1) Dakin *et al.* (2012), *Discovery of novel benzylidene-1,3-thiazolidine-2,4-diones as potent and selective inhibitors of the PIM-1, PIM-2, and PIM-3 protein kinases*; *Bioorg. Med. Chem. Lett.* **22** 4599
- 2) Keeton *et al.* (2014), *AZD1208, a potent and selective pan-Pim kinase inhibitor, demonstrates efficacy in preclinical models of acute myeloid leukemia*; *Blood* **123** 905
- 3) Kirschner *et al.* (2014), *PIK kinase inhibitor AZD1208 for treatment of MYC-driven prostate cancer*; *J. Natl. Cancer Inst.* **107** dju407
- 4) Braso-Maristany *et al.* (2016), *PIM1 kinase regulates cell death, tumor growth and chemotherapy response in triple-negative breast cancer*; *Nat. Med.* **22** 1303
- 5) Ma *et al.* (2019), *Prosurvival kinase PIM2 is a therapeutic target for eradication of chronic myeloid leukemia stem cells*; *Proc. Natl. Acad. Sci. USA* **116** 10482
- 6) Chatterjee *et al.* (2019), *Targeting PIM Kinase with PD1 Inhibition Improves Immunotherapeutic Antitumor T-cell Response*; *Clin. Cancer Res.* **25** 1036
- 7) Xin *et al.* (2021), *Targeting PIM1-Mediated Metabolism in Myeloid Suppressor Cells to Treat Cancer*; *Cancer Immunol. Res.* **9** 454

PHYSICAL DATA

Molecular Weight:	379.48
Molecular Formula:	C ₂₁ H ₂₁ N ₃ O ₂ S
Purity:	98% (HPLC)
	NMR: (Conforms)
Solubility:	DMSO (2 mg/mL with warming)
Physical Description:	Yellow 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.

Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.

Focus Biomolecules LLC 400 Davis Drive, Suite 600 Plymouth Meeting PA 19462

www.focusbiomolecules.com