



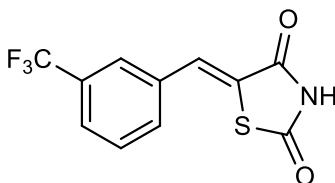
Catalog # 10-1359

SMI-4a

CAS# 438190-29-5

5-(3-Trifluoromethylbenzylidene)thiazolidine

Lot # L101027



A selective, ATP-competitive inhibitor of the Pim protein kinases (IC_{50} = 24 and 100 nM for Pim-1 and Pim-2 respectively). Selective over a panel of ~50 other kinases¹. Induces cell cycle arrest in leukemia and prostate cancer cells². Blocks the growth of a wide range of myeloid and lymphoid cell lines with precursor T-cell lymphoblastic leukemia/lymphoma (pre-T-LBL/T-ALL) being highly sensitive³. A useful tool for exploring the involvement of Pim in cellular signaling⁴. Cell permeable.

- 1) Xia *et al.* (2009), *Synthesis and evaluation of novel inhibitors of Pim-1 and Pim-2 protein kinases*; J. Med. Chem., **52** 74
- 2) Beharry *et al.* (2009), *Novel benzylidene-thiazolidine-2,4-diones inhibit Pim protein kinase activity and induce cell cycle arrest in leukemia and prostate cancer cells*; Mol. Cancer Ther., **8** 1473
- 3) Lin *et al.* (2010), *A small molecule inhibitor of Pim protein kinases blocks the growth of precursor T-cell lymphoblastic leukemia/lymphoma*; Blood, **115** 824
- 4) Zhang *et al.* (2009), *PIM1 protein kinase regulates PRAS40 phosphorylation and mTOR activity in FDCP1 cells*; Cancer Biol. Ther., **8** 846

PHYSICAL DATA

Molecular Weight:	273.23
Molecular Formula:	C ₁₁ H ₆ F ₃ NO ₂ S
Purity:	98% by TLC
	NMR: (Conforms)
Solubility:	DMSO (up to 100 mg/ml) or Ethanol (up to 40 mg/ml, with warming)
Physical Description:	Tan solid
Storage and Stability:	Store as supplied at room -20°C for up to 1 year from the date of purchase. Solutions in DMSO or ethanol may be stored at -20°C for up to 2 months.

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

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