

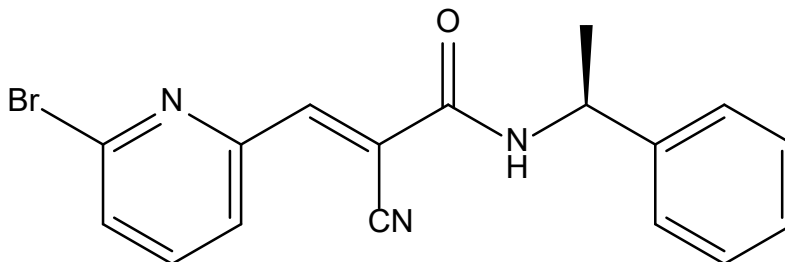
Catalog # 10-4831

WP1066

CAS# 857064-38-1

(E)-3-(6-Pyridin-2-yl)-2-cyano-N-[(1S)-1-phenylethyl]prop-2-enamide

Lot # FBS1124



WP1066 is an inhibitor of the JAK2/STAT3 pathway as well as STAT5 and AKT.^{1,2,3} It downregulated Bcl-X_L, Mcl-1, and c-myc while activating Bax and inducing apoptosis.¹ Active against human malignant glioma U87-MG (IC₅₀ = 5.6 μM) and U373-MG (IC₅₀ = 3.7 μM) cells. Enhances T-cell cytotoxicity via inhibition of regulatory T-cells.^{4,5} WP1066 abrogated PD-L1 expression in lymphoma cell lines.⁶

- 1) Kong *et al.* (2005), *Discovery of WP1066, a novel Stat3/c-myc inhibitor with potent antitumor activity against human melanoma in vitro and in vivo*; *Cancer Res.* **65** 1387
- 2) Iwamaru *et al.* (2007), *A novel inhibitor of the STAT3 pathway induces apoptosis in malignant glioma cells both invitro and in vivo*; *Oncogene* **26** 2435
- 3) Ferrajoli *et al.* (2007), *WP1066 Disrupts Janus Kinase-2 and Induces Caspase-Dependent Apoptosis in acute Myelogenous Leukemia Cells*; *Cancer Res.* **67** 11291
- 4) Kong *et al.* (2008), *A novel inhibitor of signal transducers and activators of transcription 3 activation is efficacious against established central nervous system melanoma and inhibits regulatory T cells*; *Clin.Cancer Res.* **14** 5759
- 5) Kong *et al.* (2009), *A novel phosphorylated STAT3 inhibitor enhances T cell cytotoxicity against melanoma through inhibition of regulatory T cells*; *Cancer Immunol.Immunother.* **58** 1023
- 6) Ma *et al.* (2017), *Stat3 inhibitor abrogates the expression of PD-1 ligands on Lymphoma cell lines*; *J.Clin.Exp.Hematop.* **57** 21

PHYSICAL DATA

Molecular Weight:	356.22
Molecular Formula:	C ₁₇ H ₁₄ BrN ₃ O
Purity:	>98% by HPLC
	NMR: (Conforms)
Solubility:	DMSO (>25 mg/ml)
Physical Description:	White solid
Storage and Stability:	Store as supplied at -20°C for up to 1 year from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 1 month.

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