



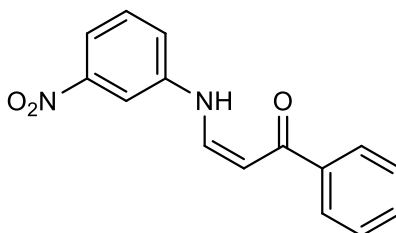
Catalog # 10-3800

DJ001

CAS# 2161305-12-8

(Z)-3-((3-nitrophenyl)amino)-1-phenylprop-2-en-1-one

Lot # X106208



DJ001 (2161306-12-8) is a potent and specific inhibitor of receptor type protein tyrosine phosphatase-sigma ($\text{PTP}\sigma$) $\text{IC}_{50}=1.54 \mu\text{M}$ and $>10 \mu\text{M}$ for 20 other phosphatases.¹ Promotes hematopoietic stem cell regeneration *in vivo*. In mice treated with 5-fluorouracil or irradiated, DJ001 promoted HSC regeneration accelerated hematologic recovery and improved survival. The mode of inhibition of $\text{PTP}\sigma$ is via non-competitive allosteric binding. Suppression of radiation-induced HSC apoptosis occurs via activation of Rho GTPase, Rac1 and induction of BCL-X_L. Treatment of irradiated human HSCs with DJ001 promotes the regeneration of human HSCs capable of multilineage *in vivo* repopulation.¹

1) Zhang *et al.* (2019), *PTPσ inhibitors promote hematopoietic stem cell regeneration*; Nat. Commun., **10** 3667

PHYSICAL DATA

Molecular Weight:	268.27
Molecular Formula:	$\text{C}_{15}\text{H}_{12}\text{N}_2\text{O}_3$
Purity:	98% by TLC
	NMR: (Conforms)
Solubility:	DMSO (up to 50 mg/ml) or Ethanol (10 mg/ml with warming)
Physical Description:	Yellow solid
Storage and Stability:	Store as supplied desiccated at -20°C for up to 2 years from the date of purchase. Solutions in DMSO or ethanol 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.

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