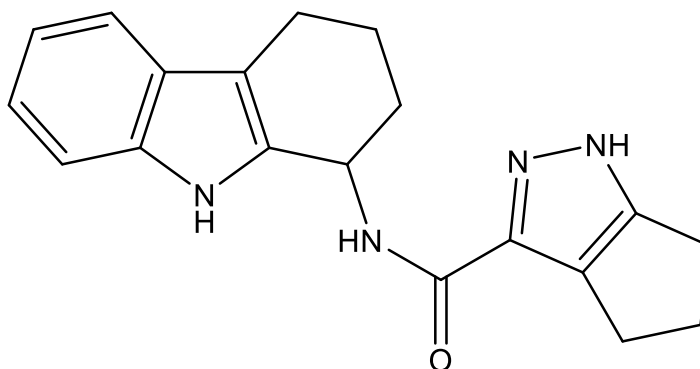


**Catalog # 10-4049**

**iPHF8**

N-(2,3,4,9-Tetrahydro-1H-carbazol-1-yl)-1,4,5,6-tetrahydrocyclopenta[c]pyrazole-3-carboxamide

Lot # FBA9115



iPHF8 is a specific inhibitor ( $IC_{50} = 2.01 \mu\text{M}$ ;  $EC_{50} = 2 \mu\text{M}$  in HeLa cells) of the human non-heme 2-oxoglutarate JmjC domain oxygenase/lysine demethylase PHF8. PHF8 also demethylates the transcription factor YY1 acting as a co-repressor for many electron transport chain genes driving mROS production and cancer development. It inhibited mROS production, cell proliferation, and colony formation in HCT116 and H1299 cells. iPHF8 significantly decreased tumor size in HCT116 derived tumors and colon cancer patient-derived xenografts.

- 1) Wu *et al.* (2024), *Targeting the PHF8/YY1 axis suppresses cancer cell growth through modulation of ROS*; Proc. Natl. Acad. Sci. **121** e2219352120

**PHYSICAL DATA**

Molecular Weight:	320.40
Molecular Formula:	$C_{19}H_{20}N_4O$
Purity:	>98% HPLC
	NMR: (Conforms)
Solubility:	Soluble in DMSO (30 mg/ml)
Physical Description:	Off-white solid
Storage and Stability:	Store as supplied at $-20^{\circ}\text{C}$ for up to 2 years from the date of purchase. Store solutions at $-20^{\circ}\text{C}$ 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.**