



Catalog # 10-1597

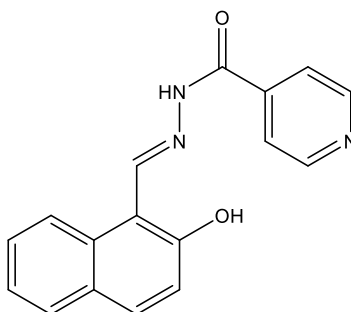
AS-8351

CAS# 796-42-9

2-Hydroxy-1-naphthylaldehyde isonicotinolyhydrazone

NSC-51355

Lot # S101083



AS-8351 has been used in a cocktail of nine small molecules used to efficiently induce cardiac reprogramming of human fibroblasts¹. It is believed that AS-8351 exerts its effects by modulating the activity of the JmjC domain-containing histone demethylases (JmjC-KDM). Thus, each of the 22 genes in the JmjC-KDM family was abrogated using small hairpin RNAs which showed that only knocking down KDM5B (or using another KDM5B inhibitor such as PBIT) could phenocopy AS-8351 in generating cardiomyocytes. This strongly suggests that KDM5B is the target of AS-8351.¹

- 1) Cao *et al.* (2016), *Conversion of human fibroblasts into functional cardiomyocytes by small molecules*; Science, **352** 1216

PHYSICAL DATA

Molecular Weight:	291.30
Molecular Formula:	C ₁₇ H ₁₃ N ₃ O ₂
Purity:	98% by TLC
	NMR: (Conforms)
Solubility:	DMSO (up to 45 mg/ml), Ethanol (up to 10 mg/ml with warming), or DMF (up to 30 mg/ml)
Physical Description:	Yellow solid
Storage and Stability:	Store as supplied, desiccated at -20°C for up to 1 year from the date of purchase. Solutions in DMSO, DMF or ethanol may be stored at -20°C for up to 1 month.

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

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