

Catalog No: 14112, 14113

Format: 25 mg, 5 mg

Chemical Properties:

MW = 291.3 $C_{17}H_{13}N_3O_2$ CAS 796-42-9

Physical Properties: Yellow powder, MP = 262-264°C

Names: AS-8351, 2-Hydroxy-1-naphthylaldehyde isonicotinoylhydrazone; or

NC-51355

Pharmacology: AS-8351 has been used in a cocktail of nine small molecules used to efficiently induce cardiac reprogramming of human fibroblasts (ref 1). 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 (ref 1).

Solubilization: May be dissolved in DMSO (45 mg/ml); Ethanol (10 mg/ml, warm); or DMF (30 mg/ml)

Fluorescent Properties: N/A

Quality Control:

>98% (TLC); NMR (Conforms)

References:

1. N Cao et al. Science 2016, 352:1216

Storage and Guarantee: Store desiccated as supplied at -20° for up to 2 years. Store solutions at -20°C for up to 1 month. This product is for research use only and is not for use in diagnostic procedures. This product is guaranteed for 6 months from date of arrival.