

# AS-8351, KDM5B histone demethylase inhibitor

| Catalog      | Unit  |
|--------------|-------|
| TBI1597-5MG  | 5 mg  |
| TBI1597-25MG | 25 mg |

#### **Product Details**

Formal Name: 2-Hydroxy-1-naphthylaldehyde isonicotinolyhydrazone

Alternate Names: NSC-51355 Molecular Formula: C<sub>17</sub>H<sub>13</sub>N<sub>3</sub>O<sub>2</sub> Formula Weight: 291.30 CAS Number: 796-42-9

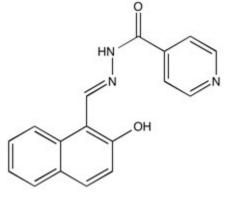
**Purity:** >98%

Formulation: powder

Solubility: Soluble in DMSO (up to 45 mg/ml), in DMF (up to 30 mg/ml) or in Ethanol

(up to 10 mg/ml with warming)

**Storage:**  $-20^{\circ}$ C **Stability:**  $\geq 2$  years.



#### **Applications**

KDM5B histone demethylase inhibitor

## **Functions**

AS-8351 has been used in a cocktail of nine small molecules used to efficiently induce cardiac reprogramming of human fibroblasts. 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.

### **Application Procedures**

First dissolved in DMSO (up to 45 mg/ml), in DMF (up to 30 mg/ml) or in Ethanol (up to 10 mg/ml with warming), then diluted to aqueous buffer. Solutions in DMSO or ethanol may be stored at -20°C for up to 3 months.

For research use only.