

## Catalog # 10-2125 CI-994

CAS# 112522-64-2
PD-123654; N-acetyl-dianiline; GOE-5549
4-(Acetylamino)-N-(2-aminophenyl)benzamide
Lot # X106329

Orally active histone deacetylase (HDAC) inhibitor,  $IC_{50} = 0.9$ , 0.9, 1.2 and >20  $\mu$ M for HDAC1, HDAC2, HDAC3 and HDAC8 respectively. Mediates  $G_1$  cell cycle arrest, inhibits proliferation and induces apoptosis *in vitro* and *in vivo*. Increases neuroplasticity during memory extinction. Protects beta cells from cytokine-induced apoptosis.

- 1) Moradei et al. (2007), Novel aminophenyl benzamide-type histone deacetylase inhibitors with enhanced potency and selectivity; J. Med. Chem., **50** 5543
- 2) Beckers et al. (2007), Distinct pharmacological properties of second generation HDAC inhibitors with the benzamide or hydroxamate head group; Int. J. Cancer, **121** 1138
- 3) Loprevite et al. (2005), In vitro study of CI-994, a histone deacetylase inhibitor, in non-small cell lung cancer cell lines; Oncol. Res., **15** 39
- 4) Chou et al. (2012), Inhibition of histone deacetylase 3 protects beta cells from cytokine-induced apoptosis; Chem. Biol., **19** 669

## **PHYSICAL DATA**

Molecular Weight: 269.30 Molecular Formula:  $C_{15}H_{15}N_3O_2$  Purity: 98% by HPLC NMR: (Conforms)

DMSO (up to 25 mg/ml)

Physical Description: Off-white solid

Solubility:

Storage and Stability: Store as supplied desiccated at -20°C for up to 1 year from the date of purchase. Solutions in

DMSO may be stored at -20°C for up to 1 month.

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