

## Catalog # 10-1522 TM-2-51

CAS# 4921-82-8 1-Benzoyl-3-phenyl-2-thiourea Lot # X106433

Highly potent and isozyme selective activator of recombinant HDAC8. Increases the activity of HDAC8 by a factor of 12 at 10  $\mu$ M. No activation of other HDACs is observed. Rescues the activity of catalytically compromised HDAC8 mutants *in vitro*.<sup>2</sup>

- 1) Singh et al. (2011), Histone deacetylase activators: N-acetylthioureas as highly potent and isozyme selective activators for human histone deacetylase-8 on a fluorescent substrate; Bioorg.Med.Chem.Lett., **21** 5920
- Decross et al. (2014), Compromised Structure and Function of HDAC8 Mutants Identified in Cornelia de Lange Syndrome Spectrum Disorders; ACS Chem.Biol. 9 2157
- 3) Singh et al. (2015), Mechanism of N-acylthiourea Mediated Activation of Human Histone Deacetylase 8 (HDAC\*) at Molecular and Cellular Levels; J.Biol.Chem 290 6607

## **PHYSICAL DATA**

 $\begin{tabular}{lll} Molecular Weight: & 256.32 \\ Molecular Formula: & C_{14}H_{12}N_2OS \\ Purity: & >98\% by TLC \\ \end{tabular}$ 

NMR: (Conforms)

Solubility: DMSO (>50 mg/ml) or ethanol (up to 8 mg/ml)

Physical Description: Off-white solid

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

DMSO or ethanol may be stored at -20°C for up to 3 months.

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