

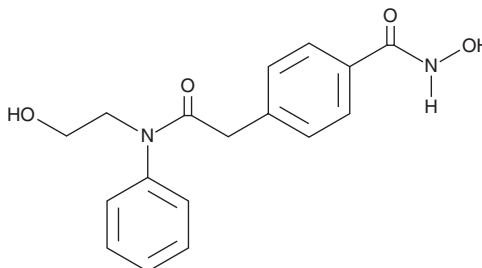
# PRODUCT INFORMATION



## HPOB

Item No. 15066

**CAS Registry No.:** 1429651-50-2  
**Formal Name:** 4-[(hydroxyamino)carbonyl]-  
N-(2-hydroxyethyl)-N-phenyl-  
benzeneacetamide  
**MF:** C<sub>17</sub>H<sub>18</sub>N<sub>2</sub>O<sub>4</sub>  
**FW:** 314.3  
**Purity:** ≥95%  
**UV/Vis.:** λ<sub>max</sub>: 235 nm  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

HPOB is supplied as a crystalline solid. A stock solution may be made by dissolving the HPOB in the solvent of choice, which should be purged with an inert gas. HPOB is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of HPOB in these solvents is approximately 15, 20, and 10 mg/ml, respectively.

HPOB is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, HPOB should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. HPOB has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

HPOB is a potent inhibitor of histone deacetylase 6 (HDAC6; IC<sub>50</sub> = 56 nM).<sup>{28379}</sup> It is at least 30-fold less effective against other HDACs.<sup>1</sup> Through its effects on HDAC6, HPOB induces acetylation of α-tubulin but not histones.<sup>1</sup> HPOB reduces the growth, but not the viability, of normal and transformed cells.<sup>1</sup> It enhances the death of transformed cells as triggered by the topoisomerase II inhibitors etoposide and doxorubicin.<sup>1</sup> HPOB enhances the cytotoxicity of the broad spectrum HDAC inhibitor SAHA (Item No. 10009929) against cancer cells in nude mice carrying an androgen-dependent CWR22 human prostate cancer xenograft.<sup>1</sup>

### Reference

1. Fang, K., Schlingmann, G., Enos, A., et al. New biotransformation products of nemadectins. *J. Antibiot. (Tokyo)* **54**(10), 805-809 (2001).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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