

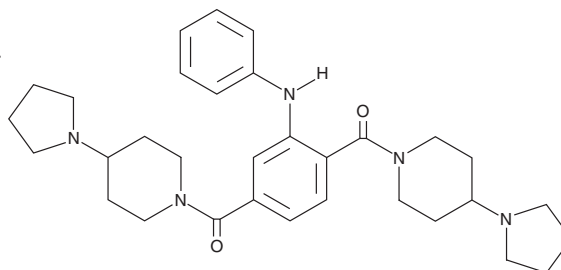
# PRODUCT INFORMATION



## UNC1215

Item No. 13968

**CAS Registry No.:** 1415800-43-9  
**Formal Name:** (2-(phenylamino)-1,4-phenylene) bis((4-(pyrrolidin-1-yl)piperidin-1-yl)methanone)  
**MF:** C<sub>32</sub>H<sub>43</sub>N<sub>5</sub>O<sub>2</sub>  
**FW:** 529.7  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 289 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

UNC1215 is supplied as a crystalline solid. A stock solution may be made by dissolving the UNC1215 in the solvent of choice, which should be purged with an inert gas. UNC1215 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of UNC1215 in these solvents is approximately 14, 5, and 16, respectively.

UNC1215 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, UNC1215 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. UNC1215 has a solubility of approximately 0.50 mg/ml in a 1:1 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

Methyllysine (Kme) recognition “reader” domains play a central role in epigenetic regulation during cellular differentiation, development, and gene transcription. UNC1215 is a potent and selective chemical probe for the Kme reading function of L3MBTL3, a member of the malignant brain tumor (MBT) family of chromatin interacting transcriptional repressors.<sup>1</sup> UNC1215 binds L3MBTL3 with a K<sub>d</sub> value of 120 nM (IC<sub>50</sub> = 40 nM), competitively displacing mono- or dimethyl-lysine containing peptides.<sup>1</sup> This probe is greater than 50-fold selective toward L3MBTL3 than other members of the human MBT family and demonstrates selectivity against more than 200 other Kme reader domains examined.<sup>1</sup> See the Structural Genomics Consortium (SGC) website for more information.

### Reference

1. James, L.I., Barsyte-Lovejoy, D., Zhong, N., *et al.* Discovery of a chemical probe for the L3MBTL3 methyllysine reader domain. *Nat. Chem. Biol.* **9**(3), 184-191 (2013).

#### 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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