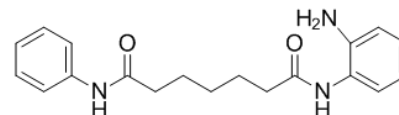


**Product Name** : HDACi-4b  
**Cat. No.** : PC-42126  
**CAS No.** : 537034-15-4  
**Molecular Formula** : C<sub>19</sub>H<sub>23</sub>N<sub>3</sub>O<sub>2</sub>  
**Molecular Weight** : 325.4048  
**Target** : HDAC  
**Solubility** : DMSO: ≥ 29 mg/mL



## Biological Activity

HDACi-4b (NKL22) is a benzamide-type **HDAC** inhibitor with IC<sub>50</sub> of 78 μM for changes of FXN mRNA in affected GM15850 cells.

HDACi-4b (NKL22) reverses FXN silencing in primary lymphocytes from individuals with Friedreich's ataxia.

HDACi-4b (NKL22) directly affects the histones associated with FXN, increasing acetylation at particular lysine residues on histones H3 and H4 (H3K14, H4K5 and H4K12).

HDACi-4b (NKL22) significantly improves motor performance, overall appearance, and body weight in an HD mouse model.

## References

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Thomas EA, et al. *Proc Natl Acad Sci U S A*. 2008 Oct 7;105(40):15564-9.

Herman D, et al. *Nat Chem Biol*. 2006 Oct;2(10):551-8.

**Caution: Product has not been fully validated for medical applications. Lab Use Only!**

E-mail: tech@probechem.com