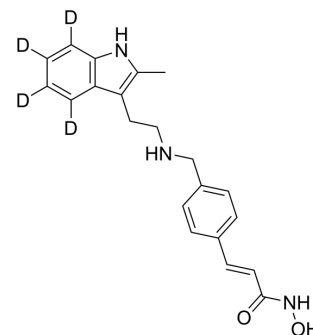


Panobinostat-d₄

| | |
|---------------------------|---|
| Cat. No.: | HY-10224S |
| CAS No.: | 1185237-51-7 |
| Molecular Formula: | C ₂₁ H ₁₉ D ₄ N ₃ O ₂ |
| Molecular Weight: | 353.45 |
| Target: | HDAC; Autophagy; Apoptosis; HIV |
| Pathway: | Cell Cycle/DNA Damage; Epigenetics; Autophagy; Apoptosis; Anti-infection |
| Storage: | Please store the product under the recommended conditions in the Certificate of Analysis. |



BIOLOGICAL ACTIVITY

| | |
|--------------------|--|
| Description | Panobinostat-d ₄ is the deuterium labeled Panobinostat. Panobinostat (LBH589; NVP-LBH589) is a potent and orally active non-selective HDAC inhibitor, and has antineoplastic activities[1][2]. Panobinostat induces HIV-1 virus production even at low concentration range 8-31 nM, stimulates HIV-1 expression in latently infected cells[4]. Panobinostat induces cell apoptosis and autophagy. Panobinostat can be used for the study of refractory or relapsed multiple myeloma[3]. |
| In Vitro | Stable heavy isotopes of hydrogen, carbon, and other elements have been incorporated into drug molecules, largely as tracers for quantitation during the drug development process. Deuteration has gained attention because of its potential to affect the pharmacokinetic and metabolic profiles of drugs ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only. |

REFERENCES

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- [3]. Crisanti MC, et al. The HDAC inhibitor panobinostat (LBH589) inhibits mesothelioma and lung cancer cells in vitro and in vivo with particular efficacy for small cell lung cancer. *Mol Cancer Ther.* 2009 Aug;8(8):2221-31.
- [4]. Ocio EM, et al. In vitro and in vivo rationale for the triple combination of panobinostat (LBH589) and dexamethasone with either bortezomib or lenalidomide in multiple myeloma. *Haematologica.* 2010 May;95(5):794-803.
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- [6]. Barton K, et al. Broad activation of latent HIV-1 in vivo. *Nat Commun.* 2016;7:12731. Published 2016 Sep 8.

Caution: Product has not been fully validated for medical applications. For research use only.

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