

## Chidamide

**Catalog #:** 27202

**Lot #:** 120203

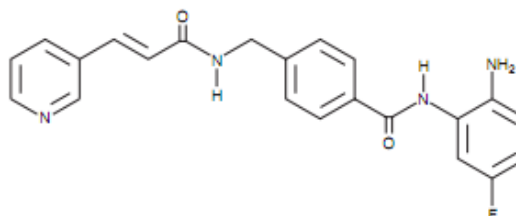
**Size:** 1 mg

**Structure:**

**CAS Registry #:** 743420-02-2

**Purity:** ≥98%

**Chemical Formula:** C<sub>22</sub>H<sub>19</sub>FN<sub>4</sub>O<sub>2</sub>



**Molecular Weight:** 390.4

**Description:** Chidamide is a histone deacetylase inhibitor which increases Histone H3 acetylation levels in LoVo and HT29 colon cancer cells at low concentrations (4 μM). Chidamide affects the activation of oncogenic signaling kinases by dose-dependently reducing phosphorylated Akt, mTOR, p70S6K, Raf and Erk 1/2 protein expression in colon cancer cells. Chidamide also dose-dependently upregulates p21 protein expression, down-regulates CDK4, and induces cell cycle arrest at the G0/G1 phase.

**Appearance:** White to off-white crystalline solid

**Solubility:** Soluble in DMSO and DMF. Sparingly soluble in aqueous buffers. For maximum solubility, dissolve first in DMSO and then dilute with aqueous buffer of choice. Do not store in aqueous solution for more than one day.

**Biological Activity:** Chidamide has shown an IC<sub>50</sub> ranging from 1 – 13 μM using an MTT assay performed on human cancer cell lines.

**Storage/Stability:** Store at or below -20 °C.

**Quality Control:** The purity was determined by HPLC analysis.

### References:

1. Liu, L., *et al.*, *Biochem. Biophys. Res. Commun.* 2010; **392**: 190-195.
2. Wang, H., *et al.*, *Mol Med Report.* 2012 Apr 5. doi: 10.3892/mmr.2012.858. [Epub ahead of print]