

Catalog # 10-2491 CUDC-101

CAS# 1012054-59-9

7-((4-((3-Ethynylphenyl)amino)-7-methoxyquinazolin-6-yl)oxy)-N-hydroxyheptanamide Lot # X105304

A novel hybrid dual-acting HDAC and receptor tyrosine kinase inhibitor. It is a potent HDAC inhibitor which also inhibits EGFR and HER2, $IC_{50} = 4.4$, 2.4 and 15.7 nM respectively. It not only blocks EGFR and HER2 but also attenuates multiple compensatory pathways such as AKT, HER3 and MET which enable tumor cells to escape the effects of conventional EGFR/HER2 inhibitors. 1,2

- 1) Lai et al. (2010), CUDC-101, a multitargeted inhibitor of histone deacetylase, epidermal growth factor receptor, and human epidermal growth factor receptor 2, exerts potential anticancer activity; Cancer Res., **70** 3647
- 2) Cai et al. (2010), Discovery of 7-(4-(3-ethynylphenylamino)-7-methoxyquinazolin-6-yloxy)-N-hydroxyheptanamide (CUDc-101) as a potent multi-acting HDAC, EGFR, and HER2 inhibitor for the treatment of cancer, J. Med. Chem., **53** 2000

PHYSICAL DATA

 $\begin{array}{lll} \mbox{Molecular Weight:} & 434.49 \\ \mbox{Molecular Formula:} & C_{24}\mbox{H}_{26}\mbox{N}_{4}\mbox{O}_{4} \\ \mbox{Purity:} & 99\% \ \mbox{by HPLC} \end{array}$

NMR: (Conforms)

Solubility: DMSO (up to 25 mg/ml)
Physical Description: White or off-white solid

Storage and Stability: Store as supplied, desiccated at -20°C for up to 1 year from the date of purchase. Solutions in

DMSO may be stored at -20°C for up to 1 month.

Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.

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