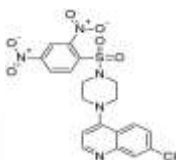


PRODUCT: VR23**ALTERNATE NAME:** 7-chloro-4-(4-((2,4-dinitrophenyl)sulfonyl)piperazin-1-yl)quinoline**CATALOG #:** B1515-5,25**AMOUNT:** 5 mg, 25 mg**STRUCTURE:****MOLECULAR FORMULA:** C₁₉H₁₆ClN₅O₆S**MOLECULAR WEIGHT:** 477.88**CAS NUMBER:** 1624602-30-7**APPEARANCE:** Yellow solid**SOLUBILITY:** DMSO (~0.5 mg/ml)**PURITY:** ≥98% by HPLC**STORAGE:** Store at -20°C. Protect from air and light.

DESCRIPTION: VR23 is a potent and selective inhibitor of trypsin-like proteasomes (IC₅₀ = 1 nmol/L), chymotrypsin-like proteasomes (IC₅₀ = 50-100 nmol/L), and caspase-like proteasomes (IC₅₀ = 3 μmol/L). The main molecular target of VR23 was β2 of the 20S proteasome catalytic subunit. It also deregulates the activity of cyclin E and other centrosomal proteins, resulting in the induction of multiple centrosome amplification, abnormal spindle formation, uneven cytokinesis, irreversible mitotic arrest, and eventually apoptosis that is specific to cancer cells.

REFERENCES: Pundir, S., *et al.* (2015). *Cancer Res.* **75**, 4164-4175.**HANDLING:** Do not take internally. Wear gloves and mask when handling the product! Avoid contact by all modes of exposure.**RELATED PRODUCTS:**Aclacinomycin A (**Cat. No. 2032-5, 25**)Calpain Inhibitor I, ALLN (**Cat. No. 1834-5, 25**)Calpain Inhibitor II, ALLM (**Cat. No. 1834-5, 25**)*Clasto*-Lactacystin β-Lactone (**Cat. No. 1710-100**)E6AP Antibody (**Cat. No. 3744-100**)(-)-Epigallocatechin gallate (**Cat. No. 1841-50**)Fenbendazole (**Cat. No. 2157-100, 500**)Isopeptidase T (short form), human recombinant (**Cat. No. 4861-25**)Isopeptidase T (long form), human recombinant (**Cat. No. 4862-25**)Lactacystin (**Cat. No. 1709-200**)MG-115 (**Cat. No. 1831-1, 5**)EZSolution™ MG-115 (**Cat. No. 2144-1**)MG-132 (**Cat. No. 1703-5, 25**)PS-341 (**Cat. No. 1846-1,5**)EZSolution™ MG-132 (**Cat. No. 1791-5**)Proteasome Activity Assay Kit (**Cat. No. K245-100**)Proteasome Substrate, Fluorogenic (**Cat. No. 1832-1, 5**)PYR-41 (**Cat. No. 1925-5, 25**)PS-341 (**Cat. No. 1846-1, 5**)EZSolution™ PS-341 (**Cat. No. 2145-1**)Suc-Leu-Leu-Val-Tyr-AMC (**Cat. No. 1833-5**)VR23 (**Cat. No. B1515-5,25**)**USAGE:** **FOR RESEARCH CH USE ONLY! Not to be used in humans**