

KDM4A/KDM4B Inhibitor, NSC636819 - Calbiochem

Art. ID SAF-5319960001

Unit EA

Description

A cell permeable dinitrobenzene derivative that acts as a competitive inhibitor of KDM4A ($IC_{50} = 6.4 \times 10^{-6} M$, $K_i = 5.5 \times 10^{-6} M$) and KDM4B ($IC_{50} = 9.3 \times 10^{-6} M$, $K_i = 3.0 \times 10^{-6} M$) and completely blocks their demethylating activity toward H3K9me3 ($\sim 5 \times 10^{-6} M$). Exhibits much reduced activities against KDM4D and KDM4E. Effectively induces apoptosis in LNCaP cells ($IC_{50} = 16.5 \times 10^{-6} M$ after 3-day culture), but does not affect normal PNT2 cells (~ 5 to $20 \times 10^{-6} M$ over 6 days). Shown to up-regulate RB1 and CDH1 tumor suppressor genes and down-regulates IGF1R, FGFR3, CCNE2, AURKA, and AURKB oncogenes. A cell permeable dinitrobenzene derivative that acts as a competitive inhibitor of KDM4A ($IC_{50} = 6.4 \times 10^{-6} M$, $K_i = 5.5 \times 10^{-6} M$) and KDM4B ($IC_{50} = 9.3 \times 10^{-6} M$, $K_i = 3.0 \times 10^{-6} M$) and completely blocks their demethylating activity toward H3K9me3 ($\sim 5 \times 10^{-6} M$). Exhibits much reduced activities against KDM4D and KDM4E. Effectively induces apoptosis in LNCaP cells ($IC_{50} = 16.5 \times 10^{-6} M$ after 3-day culture), but does not affect normal PNT2 cells (~ 5 to $20 \times 10^{-6} M$ over 6 days). Shown to up-regulate RB1 and CDH1 tumor suppressor genes and down-regulates IGF1R, FGFR3, CCNE2, AURKA, and AURKB oncogenes. Please note that the molecular weight for this compound is batch-specific due to variable water content. Please refer to the vial label or the certificate of analysis for the batch-specific molecular weight. The molecular weight provided represents the baseline molecular weight without water.