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Design, synthesis and anticancer activity of fluorocyclopentenyl-purines and –pyrimidines

Ji-seong Yoon, Dnyandev B. Jarhad, Gyudong Kim, Akshata Nayak, Long Xuan Zhao, Jinha Yu, Hong-Rae Kim, Ji Yun Lee, Varughese A. Mulamoottil, Girish Chandra, Woong Sub Byun, Sang Kook Lee, Yong-Chul Kim, Lak Shin Jeong

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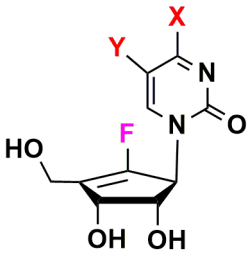
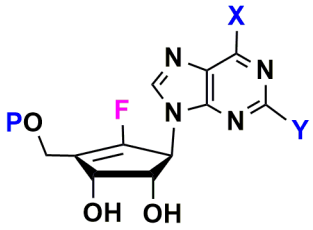


X = OH or NH_2
Y = H, F, Cl, Br, or I

Anticancer activity
X : NH_2 > OH
Y : H > halogen



X = NH_2, NHMe, NH-cyclopropyl or OH
Y = H or NH_2
P = H or phosphoramidite

Anticancer activity
X : NH_2 > NHMe > NHCP > OH
Y : H > NH_2
P : H > phosphormidite

A systematic structuire-activity relationship study of 6'-fluorocyclopentenyl-pyrimidines and -purines as anticancer agents is described