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Graphical abstract

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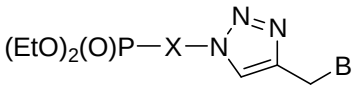

X = CH_2, $(CH_2)_2$, $(CH_2)_3$, $(CH_2)_4$,
$CH(OH)CH_2$, $CH_2CH(OH)CH_2$,
$CH(OH)CH_2CH_2$

B - nucleobases or their mimetics

The 1,2,3-triazoloacyclonucleotides were evaluated in vitro for activity against a broad variety of DNA and RNA viruses and cytostatic activity against murine leukemia L1210, human T-lymphocyte CEM and human cervix carcinoma HeLa cells. Diethyl 3-{4-[(3-benzoyl-2,4-dioxoquinazolin-1-yl)methyl]-1H-1,2,3-triazol-1-yl}propylphosphonate exhibited activity against both herpes simplex viruses (HSV-1, HSV-2) in HEL cell cultures (EC_{50} = 17 μM) and feline herpes virus (EC_{50} = 24 μM) in CRFK cell cultures. Several compounds preferentially inhibited proliferation of human T-lymphocyte CEM cells at IC_{50} in the 2.8–12 μM range.