

Title (en)  
PRODUCTION OF RADIOIODINATED 1--G(B)-D-ARABINOFURANOSYL)-5(E)-(2-( $\text{I}^*$ )-iodovinyl)uracil, AND USES THEREOF, AND RELATED ANALOGUES INCORPORATING ALTERNATIVE HALOGEN RADIONUCLIDES, THE GENERAL RADIOHALOGENATION PRECURSORS, 1-(2,3,5-TRI-O-ACETYL--G(B)-D-ARABINOFURANOSYL)-5(Z AND E)-(2-TRIMETHYLSILYL VINYL)URAC

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Application  
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Abstract (en)  
[origin: WO9001324A1] Radioactive antiviral compounds, with 1-( beta -D-arabinofuranosyl)-5(E)-(2-( $\text{I}^*$ )-iodovinyl)uracil, hereinafter referred to as "[ $\text{I}^*$ ]-IVaraU", as the prototype compound for the class of compounds designated as 1- beta -D-arabinofuranosyl)-5(E)-(2-( $\text{X}^*$ )-halogenovinyl)uracil, hereinafter referred to as "[ $\text{X}^*$ ]-XVaraU", and novel precursors thereof, 1-(2,3,5-tri-O-acetyl- beta -D-arabinofuranosyl)-5(Z and E)-(2-trimethylsilylvinyl)uracil, hereinafter referred to as "TMSVaraU", and processes for the preparation thereof, and uses thereof, wherein " $\text{I}^*$ " stands for a radionuclide of iodine, and " $\text{X}^*$ " stands for any other appropriate halogen radionuclide. Inclusion of the appropriate gamma or positron emitting iodine, or other appropriate halogen radionuclide, into the structure of [ $\text{I}^*$ ]-IVaraU, makes this agent useful as a diagnostic tool for detection of herpes virus infections in vitro and in vivo. Inclusion of the appropriate alpha- and/or beta- and/or gamma- emitting, and/or Auger electron decay-associated, (specifically-nuclear-toxic) isotopes of iodine, or other appropriate halogen radionuclides, into the structure of this agent makes the agent useful as a unique radiotherapeutic tool for herpes virus infections by precise targeting of the lethal effects of alpha and/or beta radiation and/or Auger electron decay effects to the site of viral infection.

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Citation (search report)

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- See references of WO 9001324A1

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