

SILANTES deoxy-PHOSPHORAMIDITES are now available uniformly labeled with ^2H or ^{13}C or ^{15}N or combinations

STABLE ISOTOPE LABELED PHOSPHORAMIDITES

Structural studies on large DNA and RNA molecules by nuclear magnetic resonance (NMR) requires labeling of these molecules with stable isotopes. Silantes offers a wide range of stable isotope labeled deoxy-phosphoramidites for the synthesis of oligonucleotides

SILANTES TECHNOLOGY

Silantes phosphoramidites are made from our own nucleosides. Our nucleosides are made from DNA and RNA purified from bacteria. The bacterial strain used is a chemolithoautotrophic organism which grows on isotopically labeled H_2 , O_2 and CO_2 .

ADDED VALUE

Our technology for in vivo enrichment of stable isotopes enables us to offer the deoxy-phosphoramidites at very competitive prices.

ISOTOPE ENRICHMENT

Silantes phosphoramidites can be supplied in any combination of ^2H , ^{13}C and ^{15}N . The isotopic purity for all isotopes is >98%.

Example of a phosphoramidite**:

Bz-dA-CE Phosphoramidite $^{13}\text{C}^{15}\text{N}$ labeled:

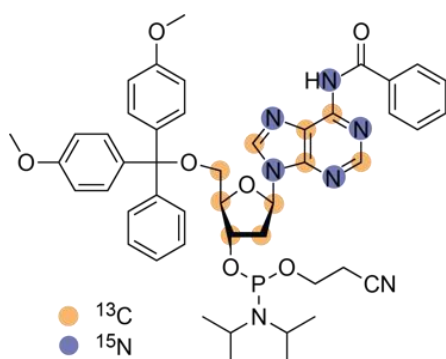


Fig1.

Quality control by ^{31}P -NMR:

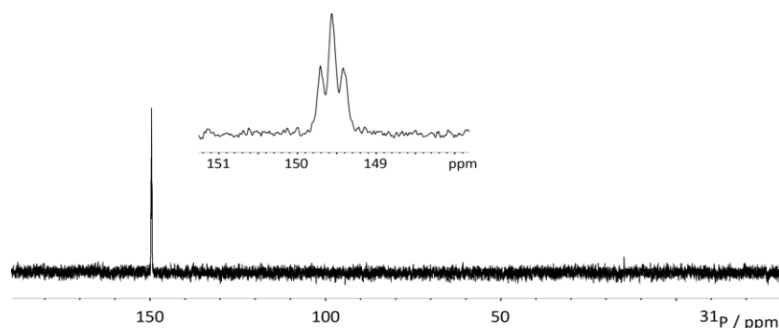


Fig2.

** ($^{13}\text{C}^{15}\text{N}$ labeled 5'-Dimethoxytrityl-N-benzoyl-2'-deoxyAdenosine,3'-[(2-cyanoethyl)-(N,N-diisopropyl)]-phosphoramidite)