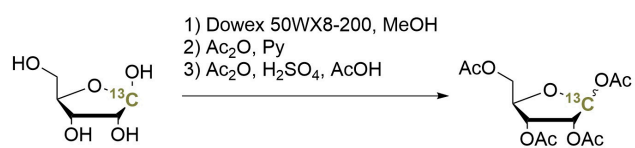
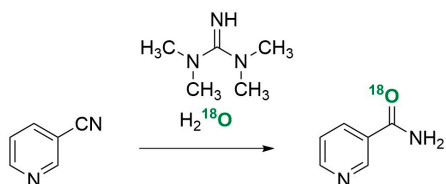


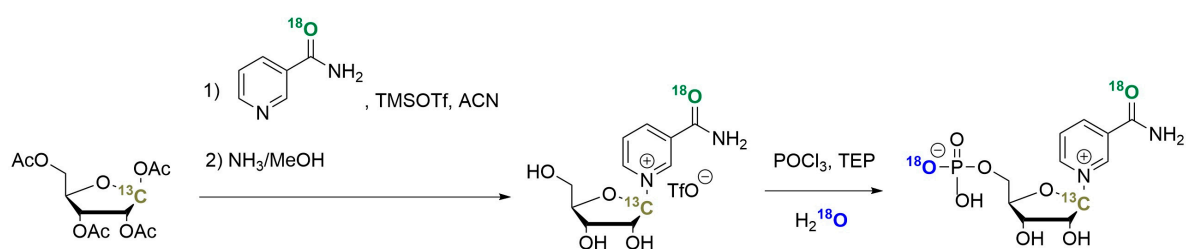
Preparation of ^{13}C -labeled ribofuranose tetraacetate



Preparation of ^{18}O -labeled nicotinamide



Preparation of isotope-labeled NMN



Scheme S1. Synthesis of [^{18}O -phosphoryl- ^{18}O -carbonyl- ^{13}C -1-ribosyl] NMN.