



Supplementary Scheme 1. Synthesis of diphenylphosphonate pentaketide **11**. Reagents: a, TIPSOTf, Et_3N , 88%; b, LiAlH_4 , 95%; c, Dess–Martin periodinane, 84%; d, *R*-4-benzyl-1,3-thiazolidine-2-thione, TiCl_4 , (–)-sparteine, NMP, 85%; e, *i*- Pr_2NEt , TIPSOTf, 80%; f, $(\text{PhO})_2\text{P}(\text{O})\text{Me}$, LiHMDS, 74%; g, $\text{HF}:\text{MeCN}:\text{H}_2\text{O}$ (1:17:1), 52%. Ac = acetyl, Bn = benzyl, Ph = phenyl, Tf = triflate, TIPS = triisopropylsilyl.