

Electronic Supporting Information

A biocompatible diazosulfonate initiator for direct encapsulation of human stem cells via two-photon polymerization †

Maximilian Tromayer, Agnes Dobos, Peter Gruber, Aliasghar Ajami, Roman Dedic, Aleksandr Ovsianikov, Robert Liska*

† M. Tromayer and A. Dobos contributed equally to this work.

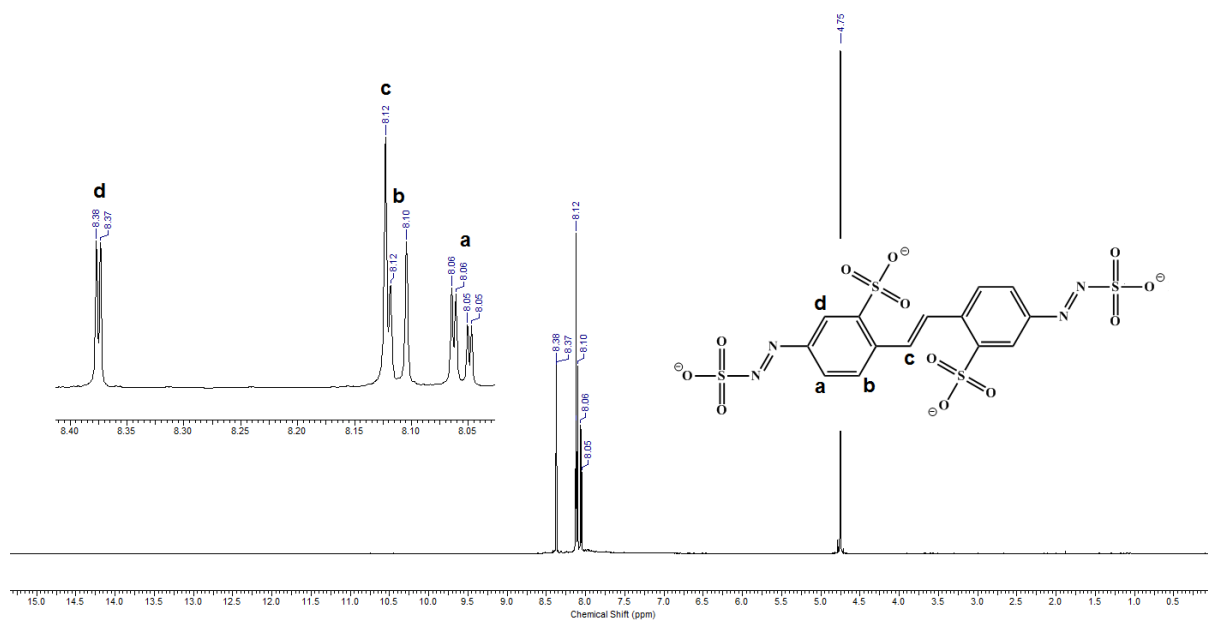


Figure S1 ¹H-NMR of DAS

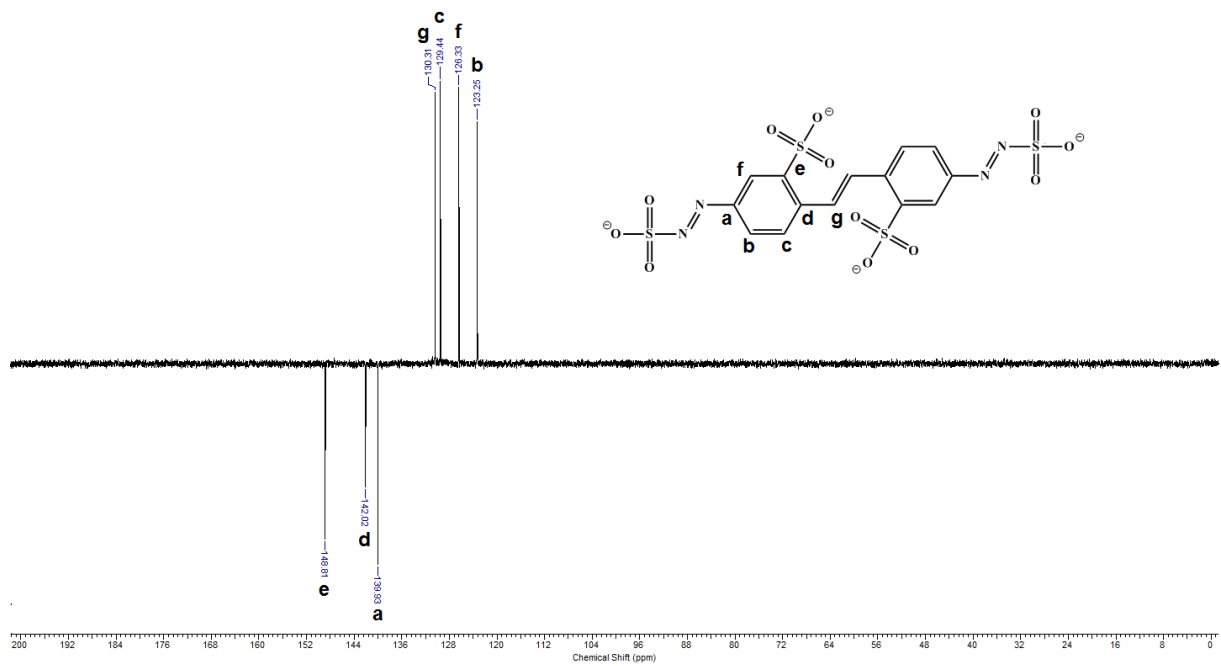


Figure S2. ^{13}C -APT-NMR of DAS

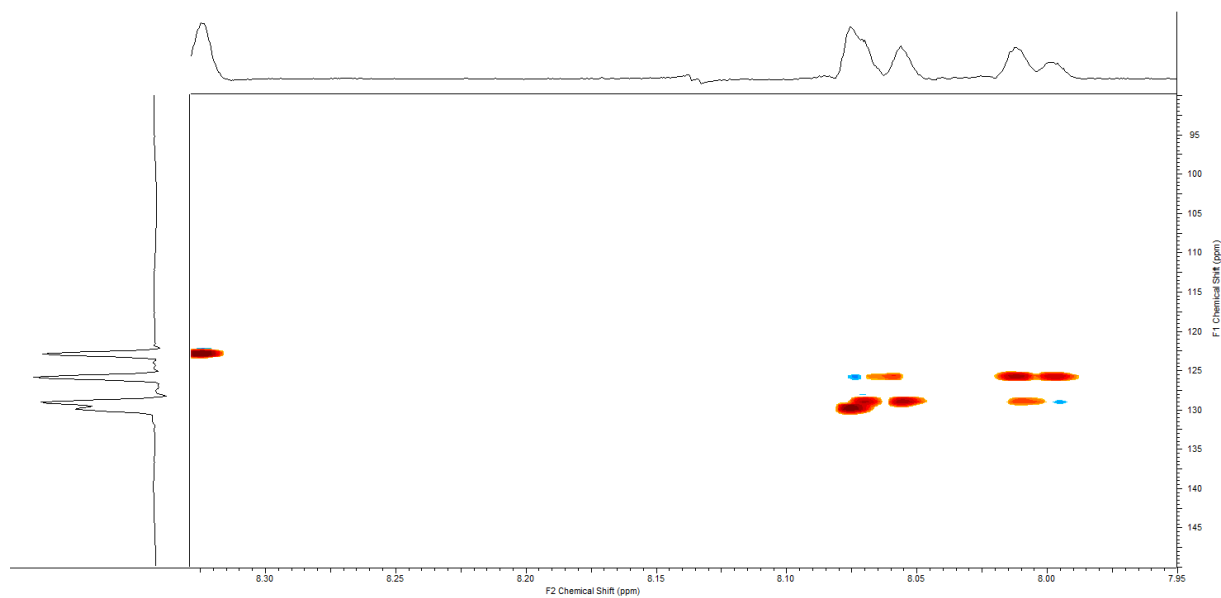


Figure S3. HSQC-NMR of DAS

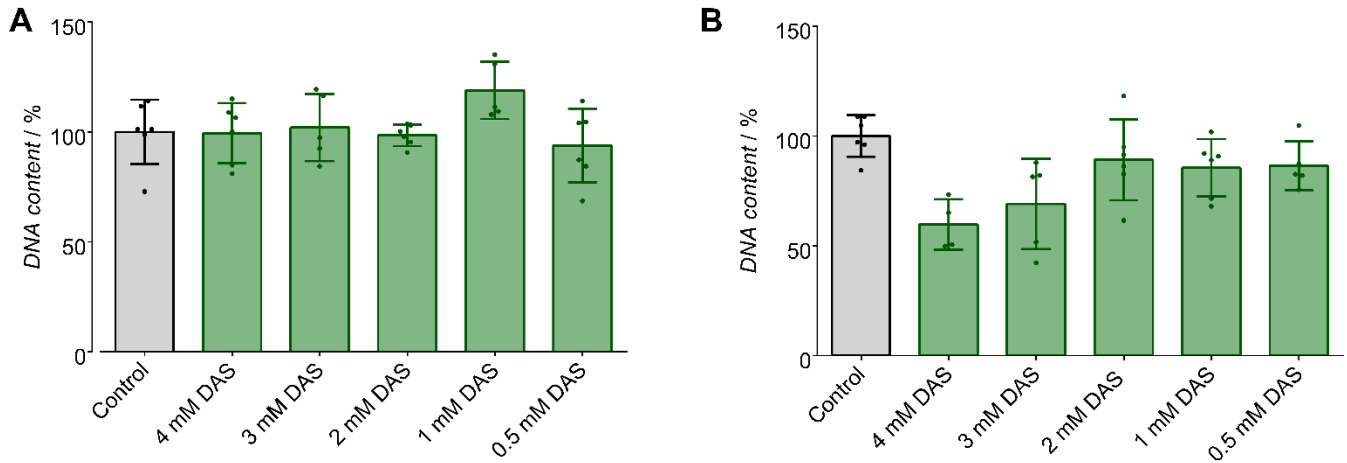


Figure S4. Quantification of DNA content. The drawback of this method is that partial precipitation of P2CK in the samples interfere with the measurement of fluorescence intensity at the required wavelengths leading to unreliable results. Therefore, this method of DNA quantification could only be used for the DAS samples (a) DNA content of the samples treated with DAS. (b) DNA content of the samples that were UV treated in order to mimic the activation of DAS.

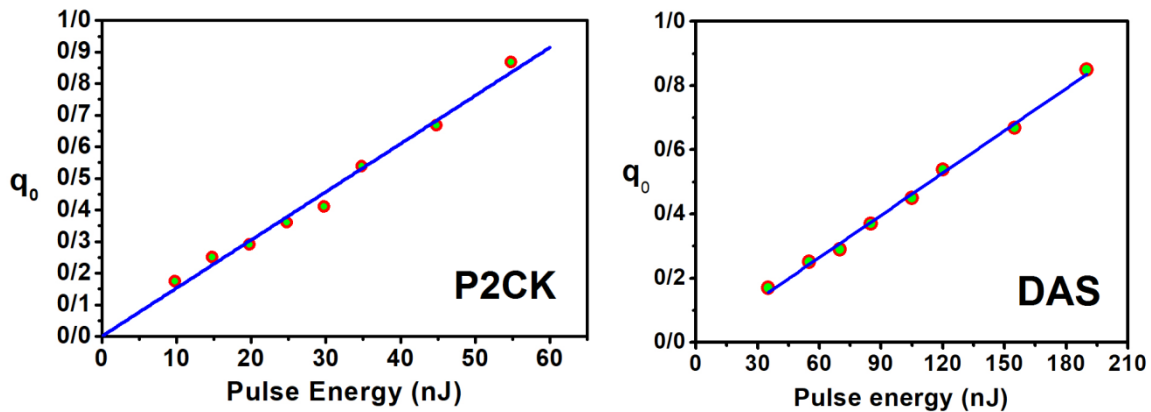


Figure S5. In conventional Z-scan measurements using an amplified Ti-sapphire system generating 25 fs pulses at 800 nm, both P2CK and DAS displayed a linear dependence of the two-photon absorbance q_0 on the pulse energy, indicating that the observed non-linear absorption is indeed two-photon absorption.