

Reactive Deep Eutectic Solvents (RDESs): a new tool for phospholipase D-catalyzed preparation of phospholipids

Chiara Allegretti¹, Francesco G. Gatti¹, Stefano Marzorati², Letizia Rossato¹, Stefano Serra², Alberto Strini³ and Paola D'Arrigo^{1,2*}

¹ Department of Chemistry, Materials and Chemical Engineering "Giulio Natta", Politecnico di Milano, p.zza L. da Vinci 32, Milano 20133, Italy; chiara.allegretti@polimi.it (C.A.); francesco.gatti@polimi.it (F.G.G.); letiziaanna.rossato@polimi.it (L.A.M.R.)

² Istituto di Scienze e Tecnologie Chimiche "Giulio Natta", Consiglio Nazionale delle Ricerche (SCITEC-CNR), via Luigi Mancinelli 7, Milano 20131, Italy; stefano.marzorati@scitec.cnr.it (S.M.); stefano.serra@cnr.it (S.S.)

³ Istituto per le Tecnologie della Costruzione, Consiglio Nazionale delle Ricerche (ITC-CNR), via Lombardia 49, San Giuliano Milanese 20098, Italy; alberto.strini@itc.cnr.it (A.S.)

* Correspondance: paola.darrigo@polimi.it (P.D.); phone: + 39-2-23993075; fax: + 39-2-23993180

Supplementary Materials

Figure S1. RDES preparation example (left image: initial mixture of ChCl (HBD) and ethylene glycol (HBA), right image: RDES A2). 2

Figure S2. ¹H NMR spectra of the four RDES A1, A2, B1 and B2 in D₂O. 3

Figure S4. Mass spectra of PG_{A1} obtained in RDES A1.4

Figure S5. Mass spectra of PG_{B1} obtained in RDES B1.5

Figure S6. Mass spectra of P-EG_{A2} obtained in RDES A2.6

Figure S7. Mass spectra of P-EG_{B2} obtained in RDES B2.7

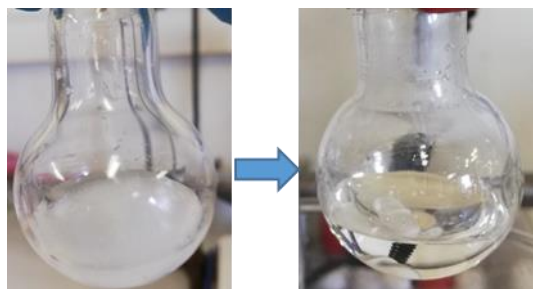
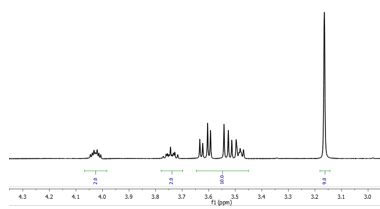
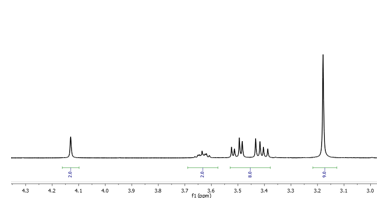


Figure S1. RDES preparation example (left image: initial mixture of ChCl (HBD) and ethylene glycol (HBA), right image: RDES A2).

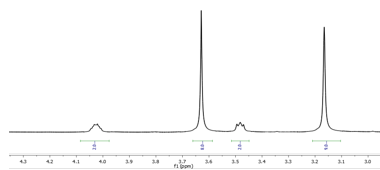
RDES A1



RDES B1



RDES A2



RDES B2

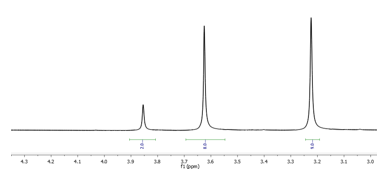


Figure S2. ^1H NMR spectra of the four RDES A1, A2, B1 and B2 in D_2O .

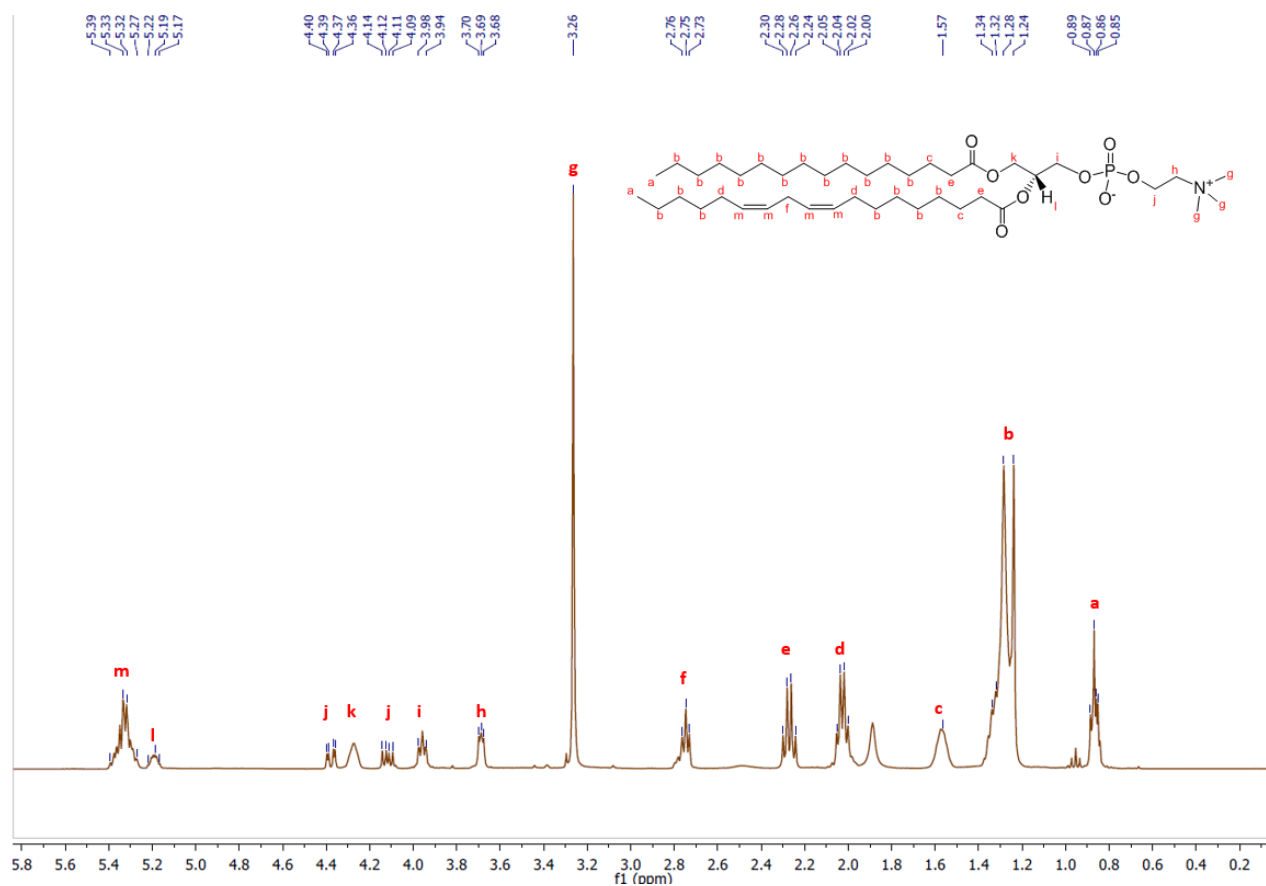


Figure S3. ¹H NMR Spectrum of PC (reported as 1-palmitoyl-2-linoleyl-PC) with signals attribution.

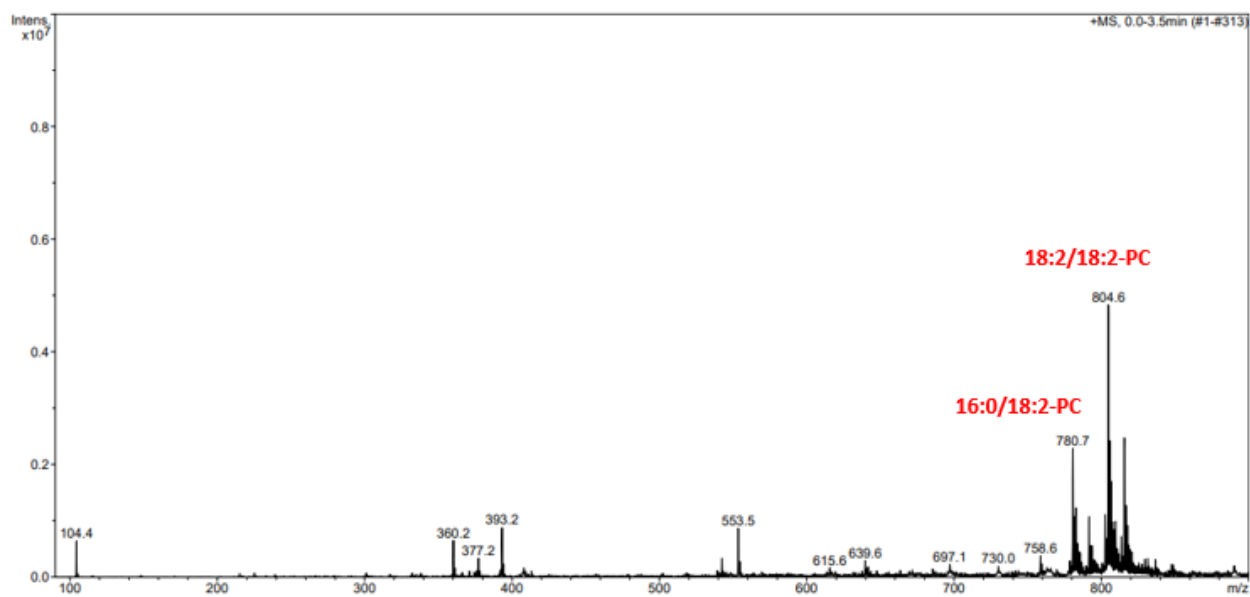
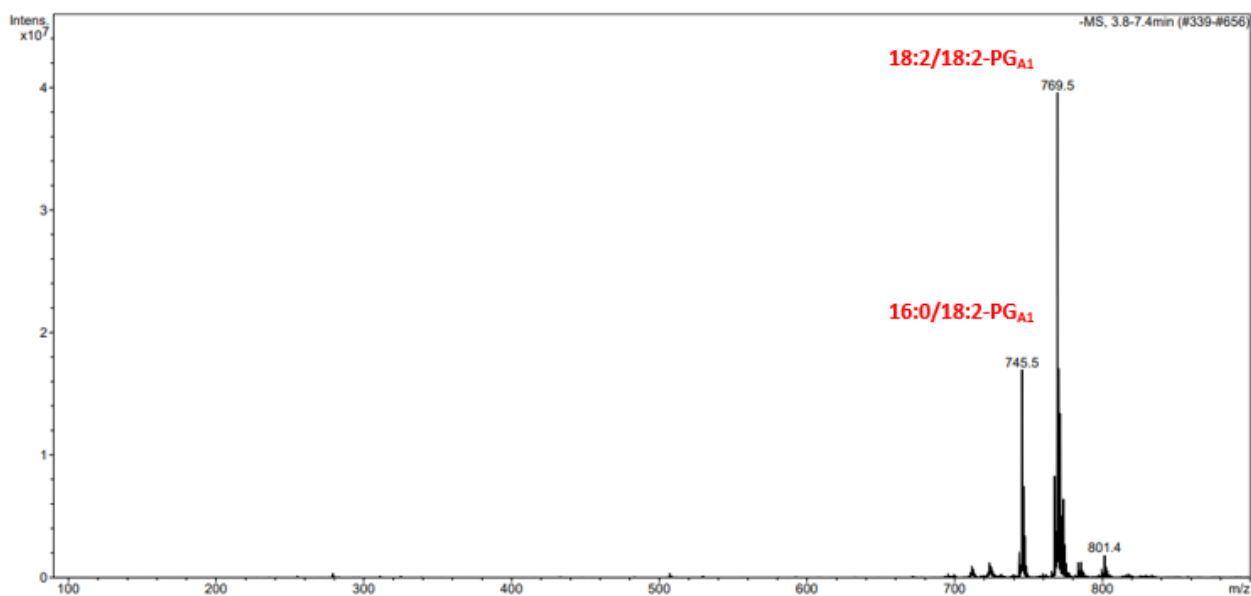


Figure S4. Mass spectra of PG_{A1} obtained in RDES A1.

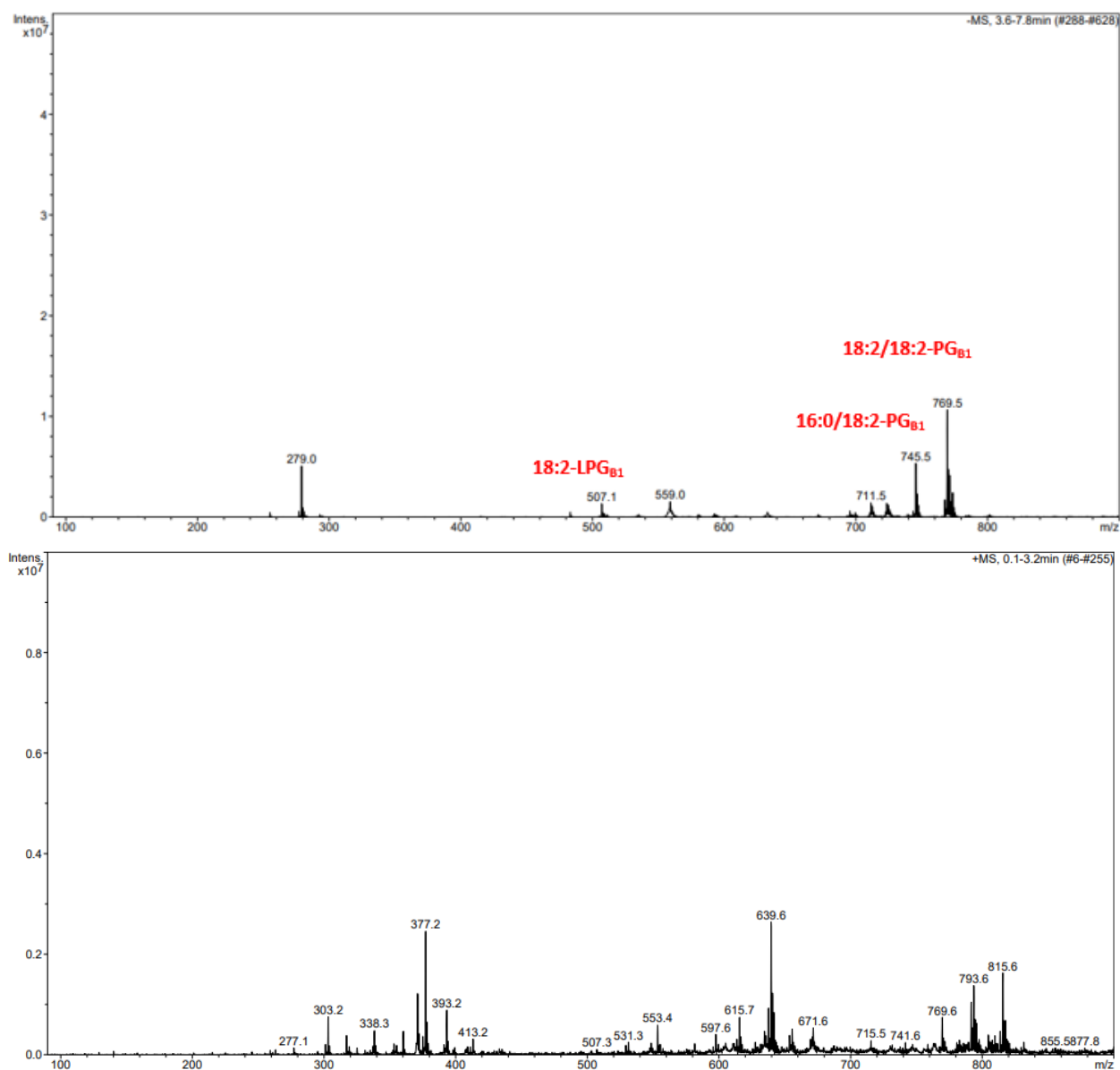


Figure S5. Mass spectra of PG_{B1} obtained in RDES B1.

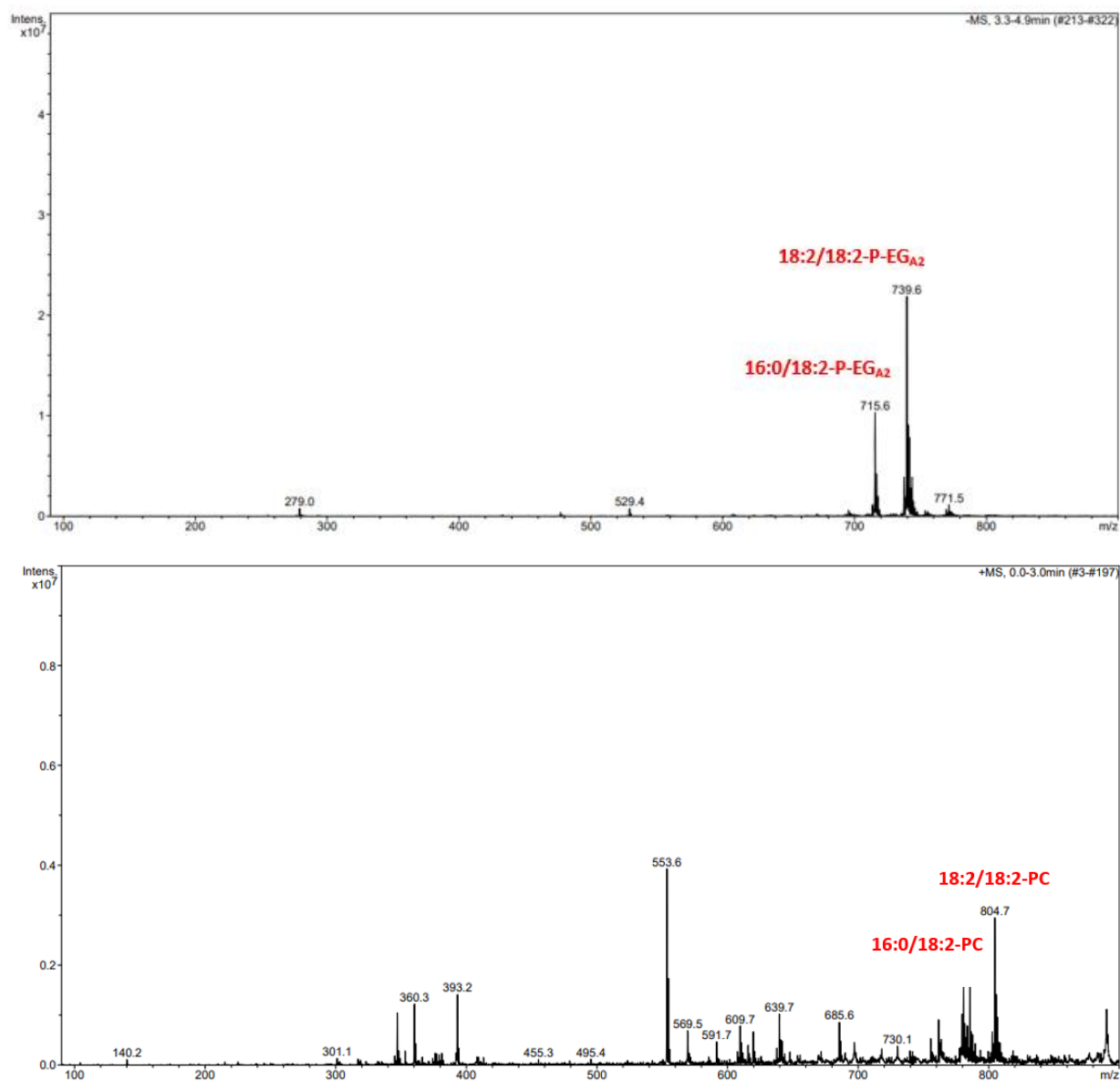


Figure S6. Mass spectra of P-EG_{A2} obtained in RDES A2.

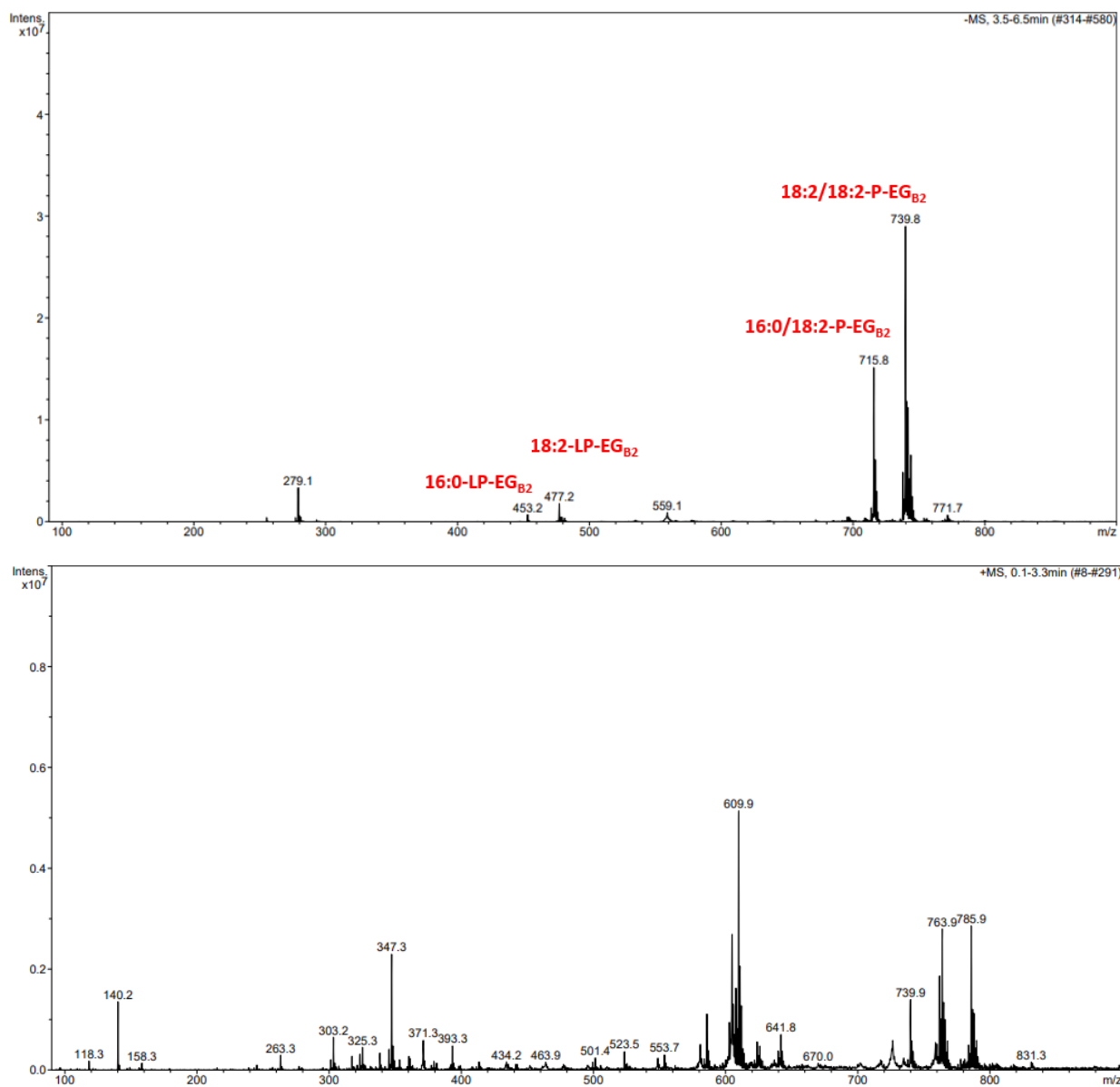


Figure S7. Mass spectra of P-EG_{B2} obtained in RDES B2.