Supporting Information for:

# Multistage Mass Spectrometry of Phospholipids using Collision-Induced Dissociation (CID) and Metastable Atom-Activated Dissociation (MAD)

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Collisional activation of $[POPC+Na]^{2+\bullet}$ at m/z 391.5 at $MS^3$ level is shown in Figure S1.

Collisional activation of $[POPC+H]^{2+\bullet}$ at m/z 380.2 at $MS^3$ level is shown in Figure S2.

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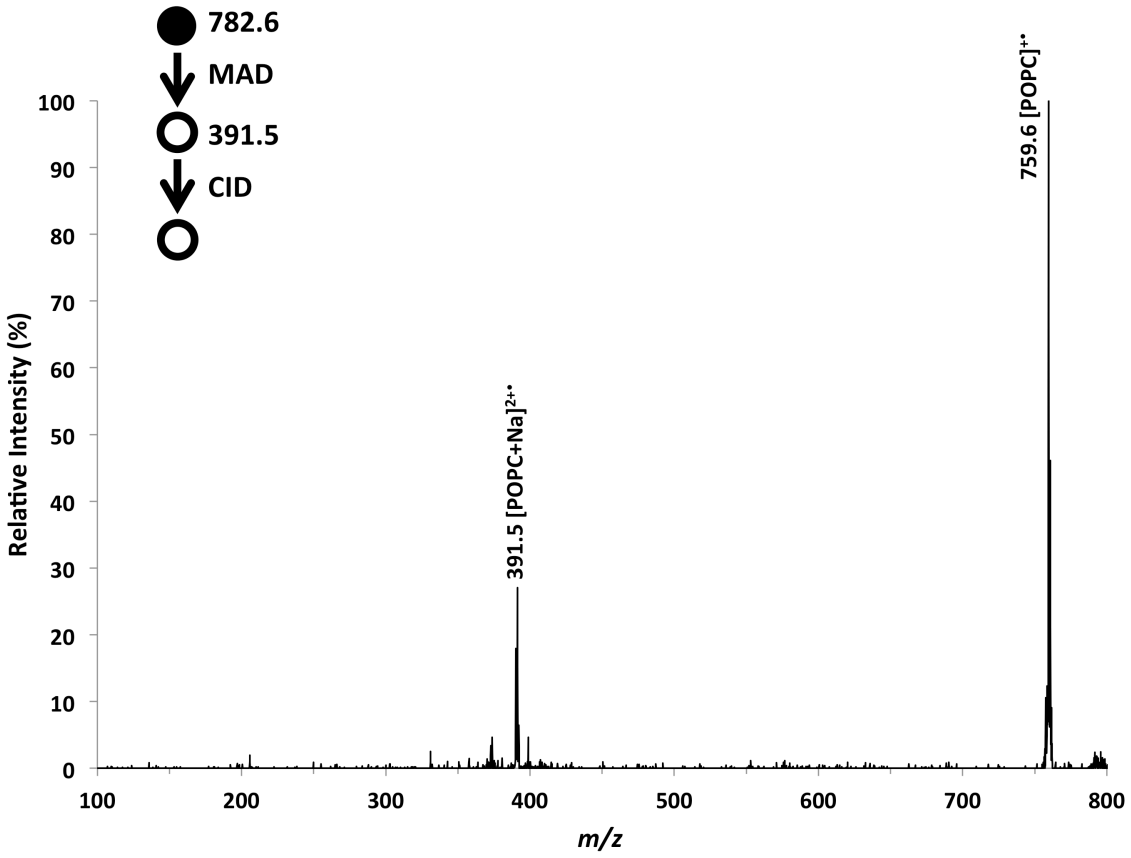


Figure S1. $MS^3$ CID spectrum of $[POPC+Na]^{2+\bullet}$ derived from He-MAD of sodiated POPC.

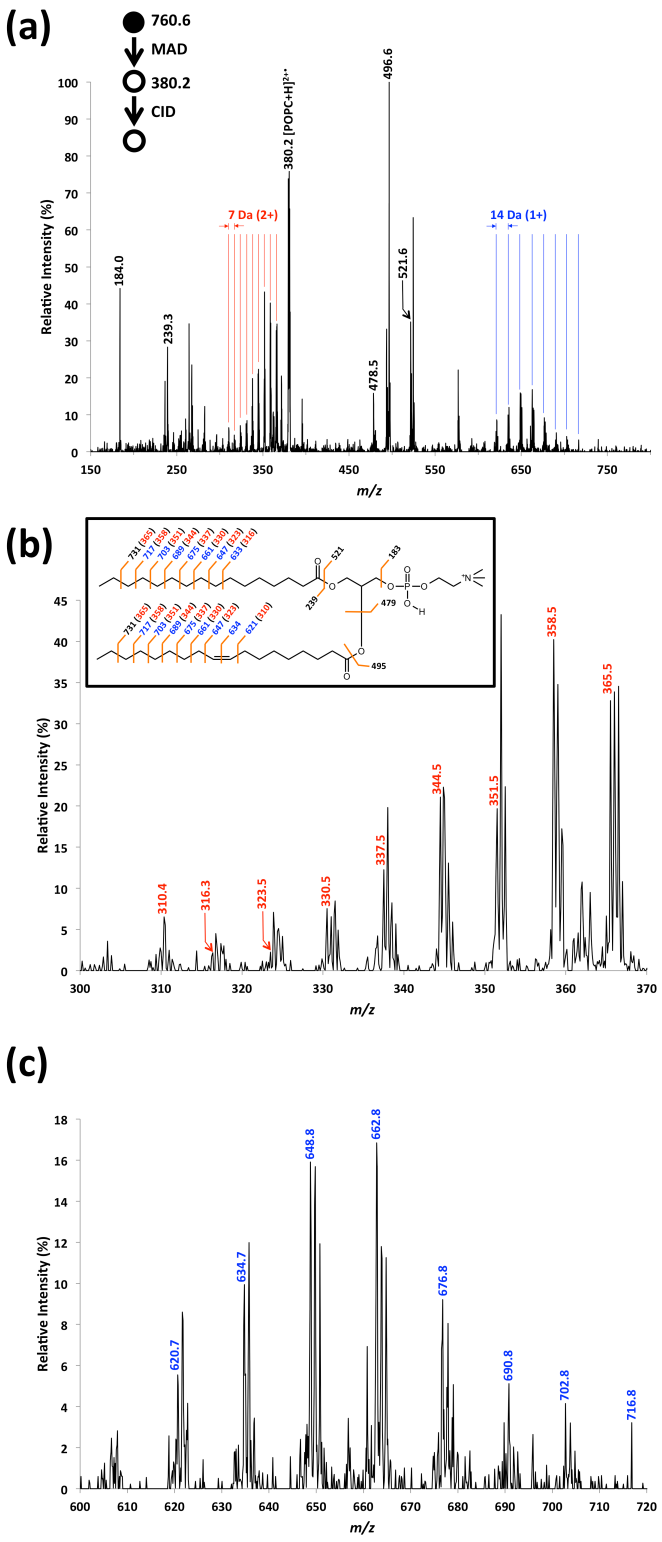


Figure S2. $MS^3$ CID spectrum of $[POPC+H]^{2+\bullet}$ derived from He-MAD of protonated POPC is shown in panel (a). *M/z* ranges of interest are magnified and shown in panel (b) and (c).