

## SUPPORTING INFORMATION

### **Separation, Identification and Cardiovascular Activities of Phospholipid Classes from *Penaeus vannamei* Head by Lipidomics and Zebrafish Models**

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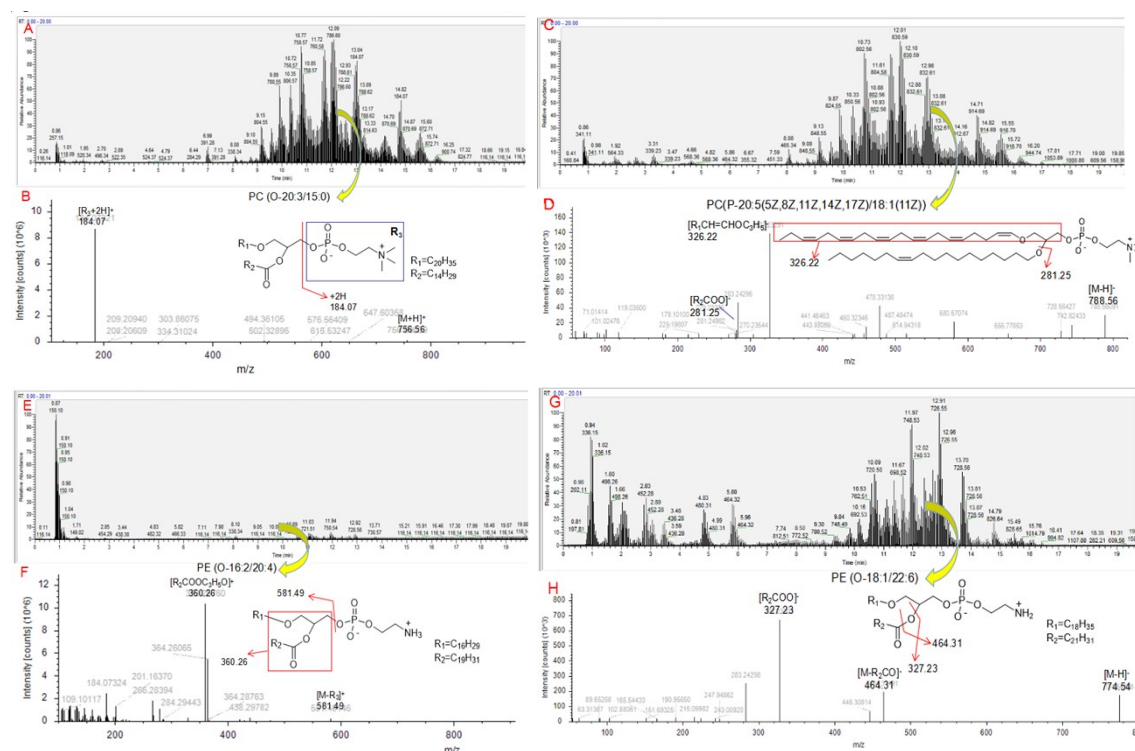
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**Figure S1** The representative spectra of phospholipids.

(A) the chromatogram of PV-PC in positive ion mode; (B) the representative spectrum of PC molecular in positive ion mode; (C) the chromatogram of PV-PC in negative ion mode; (D) the representative spectrum of PC molecular in negative ion mode; (E) the chromatogram of PV-PE in positive ion mode; (F) the representative spectrum of PE molecular in positive ion mode; (G) the chromatogram of PV-PE in negative ion mode; (H) the representative spectrum of PE molecular in negative ion mode.

**Table S1.** Phospholipid molecular species in shrimp head identified by UHPLC-Q-Exactive HF/MS.

| No. | Name             | Ion mode | Formula                                                          | Observed mass | Theoretical mass | Error (ppm) | RT (min) |
|-----|------------------|----------|------------------------------------------------------------------|---------------|------------------|-------------|----------|
| 1   | PC (O-16:2/25:0) | Pos      | C <sub>49</sub> H <sub>96</sub> N <sub>0</sub> O <sub>7</sub> P  | 841.6909      | 841.6924         | 1.78        | 15.42    |
| 2   | PC (17:2/17:2)   | Pos      | C <sub>42</sub> H <sub>76</sub> N <sub>0</sub> O <sub>8</sub> P  | 753.5296      | 753.5309         | 1.71        | 9.56     |
| 3   | PC (17:2/16:4)   | Pos      | C <sub>41</sub> H <sub>70</sub> N <sub>0</sub> O <sub>8</sub> P  | 735.4826      | 735.4839         | 1.78        | 8.01     |
| 4   | PC (O-18:1/18:0) | Pos      | C <sub>44</sub> H <sub>88</sub> N <sub>0</sub> O <sub>7</sub> P  | 773.6290      | 773.6298         | 1.02        | 13.83    |
| 5   | PC (17:1/17:1)   | Pos      | C <sub>42</sub> H <sub>80</sub> N <sub>0</sub> O <sub>8</sub> P  | 757.5611      | 757.5622         | 1.40        | 10.82    |
| 6   | PC (17:0/22:6)   | Pos      | C <sub>47</sub> H <sub>82</sub> N <sub>0</sub> O <sub>8</sub> P  | 819.5761      | 819.5778         | 2.07        | 10.98    |
| 7   | PC (24:4/24:4)   | Pos      | C <sub>56</sub> H <sub>96</sub> N <sub>0</sub> O <sub>8</sub> P  | 941.6861      | 941.6874         | 1.34        | 14.00    |
| 8   | PC (26:0/24:4)   | Pos      | C <sub>58</sub> H <sub>108</sub> N <sub>0</sub> O <sub>8</sub> P | 977.7831      | 977.7813         | 1.87        | 15.11    |
| 9   | PC (17:1/18:3)   | Pos      | C <sub>43</sub> H <sub>78</sub> N <sub>0</sub> O <sub>8</sub> P  | 767.5458      | 767.5465         | 0.96        | 12.11    |
| 10  | PC (19:2/18:4)   | Pos      | C <sub>45</sub> H <sub>78</sub> N <sub>0</sub> O <sub>8</sub> P  | 791.5450      | 791.5465         | 1.86        | 9.54     |
| 11  | PC (18:2/19:2)   | Pos      | C <sub>45</sub> H <sub>82</sub> N <sub>0</sub> O <sub>8</sub> P  | 795.5774      | 795.5778         | 0.53        | 13.31    |
| 12  | PC (O-16:0/21:1) | Pos      | C <sub>45</sub> H <sub>90</sub> N <sub>0</sub> O <sub>7</sub> P  | 787.6447      | 787.6455         | 1.02        | 14.31    |
| 13  | PC (20:4/20:4)   | Pos      | C <sub>48</sub> H <sub>80</sub> N <sub>0</sub> O <sub>8</sub> P  | 829.5607      | 829.5622         | 1.76        | 9.59     |
| 14  | PC (21:0/21:0)   | Pos      | C <sub>50</sub> H <sub>100</sub> N <sub>0</sub> O <sub>8</sub> P | 873.7176      | 873.7187         | 1.21        | 16.35    |
| 15  | PC (O-22:6/24:1) | Pos      | C <sub>54</sub> H <sub>96</sub> N <sub>0</sub> O <sub>7</sub> P  | 901.6906      | 901.6924         | 1.97        | 14.50    |
| 16  | PC (O-20:3/18:2) | Pos      | C <sub>46</sub> H <sub>84</sub> N <sub>0</sub> O <sub>7</sub> P  | 793.5972      | 793.5985         | 1.61        | 11.50    |

|    |                  |     |            |          |          |      |       |
|----|------------------|-----|------------|----------|----------|------|-------|
| 17 | PC (O-20:3/18:5) | Pos | C46H78NO7P | 787.5500 | 787.5516 | 2.08 | 9.14  |
| 18 | PC (18:0/18:3)   | Pos | C44H82NO8P | 783.5771 | 783.5778 | 0.96 | 8.01  |
| 19 | PC (17:2/16:3)   | Pos | C41H72NO8P | 737.4985 | 737.4996 | 1.52 | 8.42  |
| 20 | PC (24:1/20:4)   | Pos | C52H94NO8P | 891.6681 | 891.6717 | 4.06 | 14.12 |
| 21 | PC (O-16:2/21:0) | Pos | C45H88NO7P | 785.6288 | 785.6298 | 1.34 | 15.13 |
| 22 | PC (O-18:0/22:0) | Pos | C48H98NO7P | 831.7069 | 831.7081 | 1.44 | 16.29 |
| 23 | PC (O-14:0/24:0) | Pos | C46H94NO7P | 803.6757 | 803.6768 | 1.42 | 15.54 |
| 24 | PC (O-16:1/16:1) | Pos | C40H78NO7P | 715.5506 | 715.5516 | 1.47 | 11.17 |
| 25 | PC (12:0/13:0)   | Pos | C33H66NO8P | 635.4514 | 635.4526 | 1.89 | 6.77  |
| 26 | PC (O-14:0/21:2) | Pos | C43H84NO7P | 757.5976 | 757.5985 | 1.19 | 12.29 |
| 27 | PC (O-16:1/17:0) | Pos | C41H82NO7P | 731.5827 | 731.5829 | 0.26 | 11.96 |
| 28 | PC (14:0/15:1)   | Pos | C37H72NO8P | 689.4984 | 689.4996 | 1.74 | 8.93  |
| 29 | PC (O-20:3/6:0)  | Pos | C34H64NO7P | 629.4416 | 629.4420 | 0.59 | 7.67  |
| 30 | PC (O-18:0/19:0) | Pos | C45H92NO7P | 789.6601 | 789.6611 | 1.25 | 15.13 |
| 31 | PC (14:1/15:1)   | Pos | C37H70NO8P | 687.4829 | 687.4839 | 1.43 | 8.13  |
| 32 | PC (17:2/22:6)   | Pos | C47H78NO8P | 815.5455 | 815.5465 | 1.26 | 10.80 |
| 33 | PC (18:3/18:3)   | Pos | C44H76NO8P | 777.5298 | 777.5309 | 1.43 | 9.29  |
| 34 | PC (O-20:5/12:0) | Pos | C40H72NO7P | 709.5022 | 709.5046 | 3.37 | 8.43  |
| 35 | PC (18:0/19:1)   | Pos | C45H88NO8P | 801.6225 | 801.6248 | 2.84 | 12.08 |
| 36 | PC (O-18:0/12:0) | Pos | C38H78NO7P | 691.5507 | 691.5516 | 1.29 | 11.27 |
| 37 | PC (19:2/19:2)   | Pos | C46H84NO8P | 809.5919 | 809.5935 | 1.96 | 11.06 |
| 38 | PC (O-22:5/13:0) | Pos | C43H78NO7P | 751.5507 | 751.5516 | 1.18 | 10.09 |
| 39 | PC (16:0/24:1)   | Pos | C48H94NO8P | 843.6706 | 843.6717 | 1.35 | 14.95 |
| 40 | PC (17:0/18:0)   | Pos | C43H86NO8P | 775.6082 | 775.6091 | 1.12 | 14.90 |
| 41 | PC (16:1/17:2)   | Pos | C41H76NO8P | 741.5303 | 741.5309 | 0.85 | 11.10 |
| 42 | PC (O-22:6/13:0) | Pos | C43H76NO7P | 749.5350 | 749.5359 | 1.25 | 9.74  |
| 43 | PC (21:0/22:2)   | Pos | C51H98NO8P | 883.7017 | 883.7030 | 1.44 | 15.19 |
| 44 | PC (20:0/21:2)   | Pos | C49H94NO8P | 855.6707 | 855.6717 | 1.12 | 14.48 |
| 45 | PC (O-20:3/24:1) | Pos | C52H98NO7P | 879.7098 | 879.7081 | 1.91 | 16.33 |
| 46 | PC (O-14:0/18:1) | Pos | C40H80NO7P | 717.5667 | 717.5672 | 0.67 | 11.37 |
| 47 | PC (19:2/22:6)   | Pos | C49H82NO8P | 843.5761 | 843.5778 | 2.02 | 10.15 |
| 48 | PC (O-22:6/22:6) | Pos | C52H82NO7P | 863.5866 | 863.5829 | 4.25 | 12.24 |
| 49 | PC (14:1/14:1)   | Pos | C36H68NO8P | 673.4666 | 673.4683 | 2.52 | 8.06  |
| 50 | PC (O-18:0/15:0) | Pos | C41H84NO7P | 733.5978 | 733.5985 | 0.93 | 13.20 |
| 51 | PC (18:1/20:5)   | Pos | C46H80NO8P | 805.5608 | 805.5622 | 1.71 | 10.00 |
| 52 | PC (19:2/18:5)   | Pos | C45H76NO8P | 789.5315 | 789.5309 | 0.73 | 14.89 |
| 53 | PC (O-22:5/16:1) | Pos | C46H82NO7P | 791.5815 | 791.5829 | 1.81 | 10.68 |
| 54 | PC (14:0/19:0)   | Pos | C41H82NO8P | 747.5769 | 747.5778 | 1.24 | 11.00 |
| 55 | PC (O-22:6/20:2) | Pos | C50H86NO7P | 843.6120 | 843.6142 | 2.62 | 13.31 |
| 56 | PC (O-16:2/21:2) | Pos | C45H84NO7P | 781.5979 | 781.5985 | 0.79 | 12.09 |
| 57 | PC (O-22:6/16:0) | Pos | C46H82NO7P | 791.5815 | 791.5829 | 1.81 | 11.33 |
| 58 | PC (O-16:0/22:3) | Pos | C46H88NO7P | 797.6287 | 797.6298 | 1.44 | 13.24 |
| 59 | PC (O-22:6/18:3) | Pos | C48H80NO7P | 813.5661 | 813.5672 | 1.34 | 9.50  |

|     |                  |     |             |           |           |      |       |
|-----|------------------|-----|-------------|-----------|-----------|------|-------|
| 60  | PC (O-16:1/20:2) | Pos | C44H84NO7P  | 769.5978  | 769.5985  | 0.95 | 12.74 |
| 61  | PC (13:1/20:5)   | Pos | C41H70NO8P  | 735.4826  | 735.4839  | 1.71 | 9.14  |
| 62  | PC (26:1/26:1)   | Pos | C60H116NO8P | 1009.8421 | 1009.8439 | 1.79 | 18.06 |
| 63  | PC (O-18:2/16:0) | Pos | C42H82NO7P  | 743.5818  | 743.5829  | 1.49 | 12.33 |
| 64  | PC (20:0/20:5)   | Pos | C48H86NO8P  | 835.6063  | 835.6091  | 3.41 | 9.31  |
| 65  | PC (O-22:5/19:1) | Pos | C49H88NO7P  | 833.6285  | 833.6298  | 1.57 | 13.06 |
| 66  | PC (O-22:5/11:0) | Pos | C41H74NO7P  | 723.5202  | 723.5203  | 0.18 | 8.99  |
| 67  | PC (16:0/17:1)   | Pos | C41H80NO8P  | 745.5603  | 745.5622  | 2.56 | 8.31  |
| 68  | PC (16:2/16:3)   | Pos | C40H70NO8P  | 723.4831  | 723.4839  | 1.13 | 7.93  |
| 69  | PC (O-16:0/16:2) | Pos | C40H78NO7P  | 715.5506  | 715.5516  | 1.47 | 10.42 |
| 70  | PC (15:1/16:4)   | Pos | C39H68NO8P  | 709.4673  | 709.4683  | 1.37 | 7.40  |
| 71  | PC (O-22:4/12:0) | Pos | C42H78NO7P  | 739.5507  | 739.5516  | 1.18 | 10.24 |
| 72  | PC (19:1/20:4)   | Pos | C47H84NO8P  | 821.5929  | 821.5935  | 0.72 | 13.74 |
| 73  | PC (O-18:3/18:3) | Pos | C44H78NO7P  | 763.5507  | 763.5516  | 1.22 | 9.59  |
| 74  | PC (17:2/18:5)   | Pos | C43H72NO8P  | 761.4984  | 761.4996  | 1.54 | 14.86 |
| 75  | PC (17:0/18:2)   | Pos | C43H82NO8P  | 771.5767  | 771.5778  | 1.41 | 10.19 |
| 76  | PC (22:0/22:0)   | Pos | C52H104NO8P | 901.7501  | 901.7500  | 0.06 | 15.22 |
| 77  | PC (16:2/17:2)   | Pos | C41H74NO8P  | 739.5146  | 739.5152  | 0.80 | 8.99  |
| 78  | PC (16:0/22:5)   | Pos | C46H82NO8P  | 807.5765  | 807.5778  | 1.65 | 10.70 |
| 79  | PC (O-16:0/13:0) | Pos | C37H76NO7P  | 677.5350  | 677.5359  | 1.33 | 10.75 |
| 80  | PC (O-18:1/14:0) | Pos | C40H80NO7P  | 717.5667  | 717.5672  | 0.67 | 12.34 |
| 81  | PC (22:3/26:4)   | Pos | C56H98NO8P  | 943.7009  | 943.7030  | 2.28 | 14.56 |
| 82  | PC (O-18:4/17:0) | Pos | C43H80NO7P  | 753.5663  | 753.5672  | 1.15 | 10.66 |
| 83  | PC (O-14:0/22:2) | Pos | C44H86NO7P  | 771.6132  | 771.6142  | 1.32 | 12.93 |
| 84  | PC (18:1/20:2)   | Pos | C46H86NO8P  | 811.6072  | 811.6091  | 2.39 | 11.98 |
| 85  | PC (15:1/22:6)   | Pos | C45H76NO8P  | 789.5300  | 789.5309  | 1.10 | 9.24  |
| 86  | PC (11:0/11:0)   | Pos | C30H60NO8P  | 593.4050  | 593.4057  | 1.15 | 6.95  |
| 87  | PC (O-22:5/20:0) | Pos | C50H92NO7P  | 849.6601  | 849.6611  | 1.20 | 14.35 |
| 88  | PC (O-16:2/22:1) | Pos | C46H88NO7P  | 797.6309  | 797.6298  | 1.32 | 12.23 |
| 89  | PC (O-14:0/24:1) | Pos | C46H92NO7P  | 801.6601  | 801.6611  | 1.20 | 14.79 |
| 90  | PC (15:0/16:4)   | Pos | C39H70NO8P  | 711.4830  | 711.4839  | 1.32 | 8.00  |
| 91  | PC (O-18:4/18:3) | Pos | C44H76NO7P  | 761.5347  | 761.5359  | 1.55 | 10.21 |
| 92  | PC (O-20:4/24:1) | Pos | C52H96NO7P  | 877.6914  | 877.6924  | 1.15 | 15.16 |
| 93  | PC (25:0/21:2)   | Pos | C54H104NO8P | 925.7486  | 925.7500  | 1.47 | 16.19 |
| 94  | PC (O-22:4/14:0) | Pos | C44H82NO7P  | 767.5821  | 767.5829  | 1.04 | 11.46 |
| 95  | PC (19:2/18:3)   | Pos | C45H80NO8P  | 793.5612  | 793.5622  | 1.29 | 9.34  |
| 96  | PC (O-22:5/14:0) | Pos | C44H80NO7P  | 765.5661  | 765.5672  | 1.46 | 10.67 |
| 97  | PC (23:0/22:3)   | Pos | C53H100NO8P | 909.7175  | 909.7187  | 1.35 | 15.34 |
| 98  | PC (22:0/26:1)   | Pos | C56H110NO8P | 955.7965  | 955.7969  | 0.47 | 17.48 |
| 99  | PC (O-22:6/18:1) | Pos | C48H84NO7P  | 817.5969  | 817.5985  | 1.94 | 11.13 |
| 100 | PC (18:3/22:6)   | Pos | C48H78NO8P  | 827.5452  | 827.5465  | 1.58 | 8.96  |
| 101 | PC (O-22:6/15:1) | Pos | C45H78NO7P  | 775.5510  | 775.5516  | 0.80 | 11.35 |
| 102 | PC (O-22:4/22:2) | Pos | C52H94NO7P  | 875.6754  | 875.6768  | 1.60 | 14.62 |

|     |                  |     |             |          |          |      |       |
|-----|------------------|-----|-------------|----------|----------|------|-------|
| 103 | PC (O-22:4/21:2) | Pos | C51H92NO7P  | 861.6589 | 861.6611 | 2.53 | 14.20 |
| 104 | PC (O-22:6/12:0) | Pos | C42H74NO7P  | 735.5192 | 735.5203 | 1.44 | 9.33  |
| 105 | PC (25:0/26:4)   | Pos | C59H110NO8P | 991.7937 | 991.7969 | 3.24 | 15.40 |
| 106 | PC (25:0/22:3)   | Pos | C55H104NO8P | 937.7505 | 937.7500 | 0.50 | 15.81 |
| 107 | PC (22:4/24:4)   | Pos | C54H92NO8P  | 913.6527 | 913.6561 | 3.73 | 14.59 |
| 108 | PC (O-20:3/15:0) | Pos | C43H82NO7P  | 755.5824 | 755.5829 | 0.69 | 12.05 |
| 109 | PC (O-14:1/24:4) | Pos | C46H84NO7P  | 793.5972 | 793.5985 | 1.63 | 11.95 |
| 110 | PC (18:3/18:4)   | Pos | C44H74NO8P  | 775.5114 | 775.5152 | 4.86 | 9.52  |
| 111 | PC (O-22:3/18:2) | Pos | C48H88NO7P  | 821.6288 | 821.6298 | 1.25 | 12.05 |
| 112 | PC (25:0/22:6)   | Pos | C55H98NO8P  | 931.7011 | 931.7030 | 2.03 | 15.25 |
| 113 | PC (O-18:3/16:2) | Pos | C42H76NO7P  | 737.5349 | 737.5359 | 1.38 | 9.51  |
| 114 | PC (20:1/22:6)   | Pos | C50H86NO8P  | 859.6078 | 859.6091 | 1.56 | 11.54 |
| 115 | PC (O-22:6/16:1) | Pos | C46H80NO7P  | 789.5663 | 789.5672 | 1.14 | 10.41 |
| 116 | PC (O-20:4/21:1) | Pos | C49H90NO7P  | 835.6441 | 835.6455 | 1.70 | 13.46 |
| 117 | PC (O-18:3/24:0) | Pos | C50H96NO7P  | 853.6909 | 853.6924 | 1.80 | 14.83 |
| 118 | PC (O-22:6/18:2) | Pos | C48H82NO7P  | 815.5819 | 815.5829 | 1.28 | 10.98 |
| 119 | PC (23:0/22:2)   | Pos | C53H102NO8P | 911.7332 | 911.7343 | 1.20 | 15.84 |
| 120 | PC (18:1/22:4)   | Pos | C48H86NO8P  | 835.6075 | 835.6091 | 1.88 | 9.76  |
| 121 | PC (20:1/20:1)   | Pos | C48H92NO8P  | 841.6548 | 841.6561 | 1.58 | 14.05 |
| 122 | PC (O-18:0/25:0) | Pos | C51H104NO7P | 873.7589 | 873.7550 | 4.50 | 16.52 |
| 123 | PC (O-22:4/16:0) | Pos | C46H86NO7P  | 795.6132 | 795.6142 | 1.27 | 12.75 |
| 124 | PC (15:0/15:1)   | Pos | C38H74NO8P  | 703.5142 | 703.5152 | 1.41 | 10.22 |
| 125 | PC (O-22:5/16:2) | Pos | C46H80NO7P  | 789.5660 | 789.5672 | 1.48 | 10.10 |
| 126 | PC (O-18:4/14:0) | Pos | C40H74NO7P  | 711.5194 | 711.5203 | 1.28 | 9.48  |
| 127 | PC (O-16:0/19:0) | Pos | C43H88NO7P  | 761.6291 | 761.6298 | 0.98 | 14.26 |
| 128 | PC (24:0/22:6)   | Pos | C54H96NO8P  | 917.6844 | 917.6874 | 3.32 | 14.91 |
| 129 | PC (O-22:6/18:0) | Pos | C48H86NO7P  | 819.6129 | 819.6142 | 1.54 | 11.45 |
| 130 | PC (O-14:1/26:4) | Pos | C48H88NO7P  | 821.6285 | 821.6298 | 1.64 | 12.80 |
| 131 | PC (13:1/13:1)   | Pos | C34H64NO8P  | 645.4359 | 645.4370 | 1.70 | 6.57  |
| 132 | PC (17:1/18:5)   | Pos | C43H74NO8P  | 763.5144 | 763.5152 | 1.10 | 8.84  |
| 133 | PC (O-20:5/20:3) | Pos | C48H82NO7P  | 815.5817 | 815.5829 | 1.46 | 10.23 |
| 134 | PC (12:0/12:0)   | Pos | C32H64NO8P  | 621.4363 | 621.4370 | 1.17 | 7.48  |
| 135 | PC (O-22:4/15:0) | Pos | C45H84NO7P  | 781.5972 | 781.5985 | 1.64 | 11.85 |
| 136 | PC (22:3/22:3)   | Pos | C52H92NO8P  | 889.6537 | 889.6561 | 2.71 | 13.52 |
| 137 | PC (24:0/26:4)   | Pos | C58H108NO8P | 977.7803 | 977.7813 | 1.06 | 16.21 |
| 138 | PC (21:2/20:5)   | Pos | C49H84NO8P  | 845.5914 | 845.5935 | 2.46 | 9.55  |
| 139 | PC (21:2/20:3)   | Pos | C49H88NO8P  | 849.6231 | 849.6248 | 2.04 | 11.57 |
| 140 | PC (17:1/20:4)   | Pos | C45H80NO8P  | 793.5609 | 793.5622 | 1.59 | 12.57 |
| 141 | PC (15:0/15:0)   | Pos | C38H76NO8P  | 705.5309 | 705.5309 | 0.04 | 12.32 |
| 142 | PC (16:0/16:0)   | Pos | C40H80NO8P  | 733.5613 | 733.5622 | 1.24 | 11.65 |
| 143 | PC (21:2/21:2)   | Pos | C50H92NO8P  | 865.6547 | 865.6561 | 1.57 | 13.42 |
| 144 | PC (O-22:6/17:2) | Pos | C47H80NO7P  | 801.5671 | 801.5672 | 0.15 | 9.74  |
| 145 | PC (O-22:6/24:0) | Pos | C54H98NO7P  | 903.7068 | 903.7081 | 1.45 | 15.41 |

|     |                  |     |             |          |          |      |       |
|-----|------------------|-----|-------------|----------|----------|------|-------|
| 146 | PC (17:0/18:5)   | Pos | C43H76NO8P  | 765.5303 | 765.5309 | 0.82 | 15.60 |
| 147 | PC (20:0/18:2)   | Pos | C46H88NO8P  | 813.6236 | 813.6248 | 1.43 | 13.31 |
| 148 | PC (O-14:0/18:3) | Pos | C40H76NO7P  | 713.5350 | 713.5359 | 1.29 | 9.73  |
| 149 | PC (O-18:2/21:2) | Pos | C47H88NO7P  | 809.6287 | 809.6298 | 1.41 | 13.30 |
| 150 | PC (O-22:6/15:0) | Pos | C45H80NO7P  | 777.5660 | 777.5672 | 1.50 | 10.52 |
| 151 | PC (16:1/16:1)   | Pos | C40H76NO8P  | 729.5299 | 729.5309 | 1.43 | 9.68  |
| 152 | PC (13:0/14:0)   | Pos | C35H70NO8P  | 663.4830 | 663.4839 | 1.40 | 8.84  |
| 153 | PC (O-22:6/18:4) | Pos | C48H78NO7P  | 811.5491 | 811.5516 | 3.09 | 8.91  |
| 154 | PC (O-18:4/21:2) | Pos | C47H84NO7P  | 805.5973 | 805.5985 | 1.51 | 11.69 |
| 155 | PC (O-14:1/18:1) | Pos | C40H78NO7P  | 715.5506 | 715.5516 | 1.38 | 12.51 |
| 156 | PC (15:0/18:3)   | Pos | C41H76NO8P  | 741.5296 | 741.5309 | 1.71 | 9.60  |
| 157 | PC (O-18:0/21:1) | Pos | C47H94NO7P  | 815.6758 | 815.6768 | 1.19 | 16.25 |
| 158 | PC (O-20:4/17:1) | Pos | C45H82NO7P  | 779.5819 | 779.5829 | 1.23 | 11.32 |
| 159 | PC (O-18:4/15:0) | Pos | C41H76NO7P  | 725.5352 | 725.5359 | 0.96 | 9.82  |
| 160 | PC (16:2/16:2)   | Pos | C40H72NO8P  | 725.4987 | 725.4996 | 1.21 | 8.49  |
| 161 | PC (22:0/24:4)   | Pos | C54H100NO8P | 921.7175 | 921.7187 | 1.31 | 15.12 |
| 162 | PC (21:0/18:3)   | Pos | C47H88NO8P  | 825.6231 | 825.6248 | 2.05 | 13.24 |
| 163 | PC (17:0/17:0)   | Pos | C42H84NO8P  | 761.5922 | 761.5935 | 1.77 | 10.97 |
| 164 | PC (15:0/24:4)   | Pos | C47H86NO8P  | 823.6101 | 823.6091 | 1.20 | 9.71  |
| 165 | PC (14:1/18:1)   | Pos | C40H76NO8P  | 729.5303 | 729.5309 | 0.88 | 11.65 |
| 166 | PC (O-14:0/20:1) | Pos | C42H84NO7P  | 745.5976 | 745.5985 | 1.17 | 12.62 |
| 167 | PC (20:3/20:3)   | Pos | C48H84NO8P  | 833.5922 | 833.5935 | 1.60 | 11.58 |
| 168 | PC (18:2/18:5)   | Pos | C44H74NO8P  | 775.5114 | 775.5152 | 4.86 | 8.32  |
| 169 | PC (12:0/16:0)   | Pos | C36H72NO8P  | 677.4983 | 677.4996 | 1.86 | 9.34  |
| 170 | PC (24:2/24:4)   | Pos | C56H100NO8P | 945.7153 | 945.7187 | 3.64 | 14.98 |
| 171 | PC (O-18:2/27:0) | Pos | C53H104NO7P | 897.7563 | 897.7550 | 1.41 | 16.21 |
| 172 | PC (O-14:0/22:3) | Pos | C44H84NO7P  | 769.5977 | 769.5985 | 1.10 | 11.97 |
| 173 | PC (17:0/17:1)   | Pos | C42H82NO8P  | 759.5774 | 759.5778 | 0.51 | 8.84  |
| 174 | PC (22:3/22:4)   | Pos | C52H90NO8P  | 887.6368 | 887.6404 | 4.09 | 14.22 |
| 175 | PC (23:0/22:1)   | Pos | C53H104NO8P | 913.7493 | 913.7500 | 0.81 | 16.69 |
| 176 | PC (O-16:1/19:0) | Pos | C43H86NO7P  | 759.6137 | 759.6142 | 0.70 | 15.23 |
| 177 | PC (15:0/16:2)   | Pos | C39H74NO8P  | 715.5139 | 715.5152 | 1.87 | 9.17  |
| 178 | PC (O-18:1/20:1) | Pos | C46H90NO7P  | 799.6465 | 799.6455 | 1.29 | 15.48 |
| 179 | PC (18:1/19:2)   | Pos | C45H84NO8P  | 797.5903 | 797.5935 | 4.04 | 13.59 |
| 180 | PC (O-22:6/22:1) | Pos | C52H92NO7P  | 873.6595 | 873.6611 | 1.87 | 13.55 |
| 181 | PC (16:0/14:1)   | Pos | C38H74NO8P  | 703.5153 | 703.5152 | 0.16 | 11.40 |
| 182 | PC (O-18:0/9:0)  | Pos | C35H72NO7P  | 649.5037 | 649.5046 | 1.37 | 9.42  |
| 183 | PC (21:0/22:3)   | Pos | C51H96NO8P  | 881.6865 | 881.6874 | 1.08 | 14.64 |
| 184 | PC (O-14:1/14:1) | Pos | C36H70NO7P  | 659.4877 | 659.4890 | 1.99 | 9.65  |
| 185 | PC (O-16:0/21:2) | Pos | C45H88NO7P  | 785.6286 | 785.6298 | 1.54 | 13.57 |
| 186 | PC (O-18:5/16:2) | Pos | C42H72NO7P  | 733.5038 | 733.5046 | 1.05 | 10.52 |
| 187 | PC (17:1/22:6)   | Pos | C47H80NO8P  | 817.5607 | 817.5622 | 1.86 | 9.94  |
| 188 | PC (O-22:6/13:1) | Pos | C43H74NO7P  | 747.5193 | 747.5203 | 1.34 | 11.15 |

|     |                  |     |             |          |          |      |       |
|-----|------------------|-----|-------------|----------|----------|------|-------|
| 189 | PC (22:3/24:4)   | Pos | C54H94NO8P  | 915.6706 | 915.6717 | 1.26 | 13.86 |
| 190 | PC (16:1/18:5)   | Pos | C42H72NO8P  | 749.4962 | 749.4996 | 4.52 | 8.99  |
| 191 | PC (O-20:5/18:5) | Pos | C46H74NO7P  | 783.5191 | 783.5203 | 1.58 | 8.14  |
| 192 | PC (O-16:0/17:2) | Pos | C41H80NO7P  | 729.5662 | 729.5672 | 1.44 | 11.00 |
| 193 | PC (18:4/20:5)   | Pos | C46H74NO8P  | 799.5138 | 799.5152 | 1.78 | 8.02  |
| 194 | PC (O-18:4/19:2) | Pos | C45H80NO7P  | 777.5663 | 777.5672 | 1.12 | 12.65 |
| 195 | PC (15:1/15:1)   | Pos | C38H72NO8P  | 701.4988 | 701.4996 | 1.17 | 8.63  |
| 196 | PC (O-14:0/18:0) | Pos | C40H82NO7P  | 719.5821 | 719.5829 | 1.14 | 12.55 |
| 197 | PC (O-18:5/3:0)  | Pos | C29H50NO7P  | 555.3320 | 555.3325 | 0.95 | 1.83  |
| 198 | PC (O-22:3/15:0) | Pos | C45H86NO7P  | 783.6134 | 783.6142 | 1.08 | 12.61 |
| 199 | PC (19:0/20:4)   | Pos | C47H86NO8P  | 823.6076 | 823.6091 | 1.81 | 12.55 |
| 200 | PC (23:0/18:2)   | Pos | C49H94NO8P  | 855.6709 | 855.6717 | 0.89 | 15.39 |
| 201 | PC (21:0/18:2)   | Pos | C47H90NO8P  | 827.6394 | 827.6404 | 1.20 | 13.91 |
| 202 | PC (24:1/24:2)   | Pos | C56H106NO8P | 951.7640 | 951.7656 | 1.73 | 16.16 |
| 203 | PC (16:0/17:0)   | Pos | C41H82NO8P  | 747.5769 | 747.5778 | 1.18 | 12.33 |
| 204 | PC (16:0/23:0)   | Pos | C47H94NO8P  | 831.6708 | 831.6717 | 1.14 | 15.32 |
| 205 | PC (16:0/20:5)   | Pos | C44H78NO8P  | 779.5455 | 779.5465 | 1.30 | 9.95  |
| 206 | PC (18:1/24:2)   | Pos | C50H94NO8P  | 867.6702 | 867.6717 | 1.79 | 14.18 |
| 207 | PC (18:1/18:2)   | Pos | C44H82NO8P  | 783.5765 | 783.5778 | 1.68 | 10.90 |
| 208 | PC (22:1/22:6)   | Pos | C52H90NO8P  | 887.6392 | 887.6404 | 1.41 | 12.76 |
| 209 | PC (18:0/20:4)   | Pos | C46H84NO8P  | 809.5920 | 809.5935 | 1.84 | 11.90 |
| 210 | PC (O-16:2/20:4) | Pos | C44H78NO7P  | 763.5503 | 763.5516 | 1.65 | 12.57 |
| 211 | PC (22:0/18:2)   | Pos | C48H92NO8P  | 841.6549 | 841.6561 | 1.46 | 14.39 |
| 212 | PC (15:0/20:4)   | Pos | C43H78NO8P  | 767.5455 | 767.5465 | 1.26 | 10.11 |
| 213 | PC (18:0/22:5)   | Pos | C48H86NO8P  | 835.6077 | 835.6091 | 1.69 | 11.95 |
| 214 | PC (22:1/18:2)   | Pos | C48H90NO8P  | 839.6391 | 839.6404 | 1.54 | 13.21 |
| 215 | PC (15:0/18:1)   | Pos | C41H80NO8P  | 745.5613 | 745.5622 | 1.25 | 11.15 |
| 216 | PC (17:1/18:2)   | Pos | C43H80NO8P  | 769.5605 | 769.5622 | 2.17 | 10.41 |
| 217 | PC (18:1/18:1)   | Pos | C44H84NO8P  | 785.5926 | 785.5935 | 1.17 | 11.85 |
| 218 | PC (O-22:4/15:1) | Pos | C45H82NO7P  | 779.5820 | 779.5829 | 1.19 | 11.06 |
| 219 | PC (18:3/20:5)   | Pos | C46H76NO8P  | 801.5278 | 801.5309 | 3.92 | 8.53  |
| 220 | PC (16:1/18:2)   | Pos | C42H78NO8P  | 755.5454 | 755.5465 | 1.43 | 9.80  |
| 221 | PC (14:0/18:3)   | Pos | C40H74NO8P  | 727.5145 | 727.5152 | 1.03 | 8.99  |
| 222 | PC (19:0/20:5)   | Pos | C47H84NO8P  | 821.5924 | 821.5935 | 1.38 | 11.51 |
| 223 | PC (19:0/18:2)   | Pos | C45H86NO8P  | 799.6078 | 799.6091 | 1.58 | 12.48 |
| 224 | PC (O-22:3/13:0) | Pos | C43H82NO7P  | 755.5822 | 755.5829 | 0.98 | 11.42 |
| 225 | PC (14:0/16:0)   | Pos | C38H76NO8P  | 705.5298 | 705.5309 | 1.60 | 10.47 |
| 226 | PC (21:0/20:5)   | Pos | C49H88NO8P  | 849.6233 | 849.6248 | 1.73 | 13.08 |
| 227 | PC (16:0/22:0)   | Pos | C46H92NO8P  | 817.6549 | 817.6561 | 1.48 | 14.93 |
| 228 | PC (20:2/20:2)   | Pos | C48H88NO8P  | 837.6239 | 837.6248 | 1.09 | 13.19 |
| 229 | PC (25:0/18:1)   | Pos | C51H100NO8P | 885.7175 | 885.7187 | 1.37 | 16.02 |
| 230 | PC (O-22:3/20:4) | Pos | C50H88NO7P  | 845.6285 | 845.6298 | 1.57 | 12.32 |
| 231 | PC (20:3/22:6)   | Pos | C50H82NO8P  | 855.5762 | 855.5778 | 1.92 | 9.86  |

|     |                  |     |             |          |          |      |       |
|-----|------------------|-----|-------------|----------|----------|------|-------|
| 232 | PC (20:2/22:6)   | Pos | C50H84NO8P  | 857.5919 | 857.5935 | 1.90 | 10.61 |
| 233 | PC (17:0/20:4)   | Pos | C45H82NO8P  | 795.5764 | 795.5778 | 1.75 | 11.29 |
| 234 | PC (16:0/22:6)   | Pos | C46H80NO8P  | 805.5609 | 805.5622 | 1.65 | 10.38 |
| 235 | PC (19:0/22:6)   | Pos | C49H86NO8P  | 847.6080 | 847.6091 | 1.31 | 12.24 |
| 236 | PC (21:0/20:4)   | Pos | C49H90NO8P  | 851.6396 | 851.6404 | 0.90 | 13.76 |
| 237 | PC (15:0/22:6)   | Pos | C45H78NO8P  | 791.5452 | 791.5465 | 1.59 | 9.82  |
| 238 | PC (O-14:0/17:0) | Pos | C39H80NO7P  | 705.5664 | 705.5672 | 1.18 | 11.89 |
| 239 | PC (22:0/20:4)   | Pos | C50H92NO8P  | 865.6547 | 865.6561 | 1.61 | 14.22 |
| 240 | PC (16:0/18:0)   | Pos | C42H84NO8P  | 761.5926 | 761.5935 | 1.13 | 12.94 |
| 241 | PC (21:0/22:6)   | Pos | C51H90NO8P  | 875.6390 | 875.6404 | 1.60 | 13.50 |
| 242 | PC (18:1/26:1)   | Pos | C52H100NO8P | 897.7173 | 897.7187 | 1.59 | 15.53 |
| 243 | PC (17:0/20:5)   | Pos | C45H80NO8P  | 793.5609 | 793.5622 | 1.64 | 10.56 |
| 244 | PC (20:0/18:1)   | Pos | C46H90NO8P  | 815.6394 | 815.6404 | 1.29 | 14.11 |
| 245 | PC (19:0/20:3)   | Pos | C47H88NO8P  | 825.6233 | 825.6248 | 1.88 | 11.88 |
| 246 | PC (23:0/18:1)   | Pos | C49H96NO8P  | 857.6861 | 857.6874 | 1.50 | 15.33 |
| 247 | PC (18:0/18:0)   | Pos | C44H88NO8P  | 789.6239 | 789.6248 | 1.15 | 14.08 |
| 248 | PC (24:1/26:2)   | Pos | C58H110NO8P | 979.7956 | 979.7969 | 1.38 | 16.77 |
| 249 | PC (22:0/20:5)   | Pos | C50H90NO8P  | 863.6390 | 863.6404 | 1.64 | 13.66 |
| 250 | PC (24:2/24:2)   | Pos | C56H104NO8P | 949.7486 | 949.7500 | 1.46 | 15.65 |
| 251 | PC (18:2/26:2)   | Pos | C52H96NO8P  | 893.6860 | 893.6874 | 1.59 | 14.37 |
| 252 | PC (16:0/21:0)   | Pos | C45H90NO8P  | 803.6393 | 803.6404 | 1.43 | 14.53 |
| 253 | PC (18:1/26:2)   | Pos | C52H98NO8P  | 895.7015 | 895.7030 | 1.70 | 14.94 |
| 254 | PC (17:0/18:3)   | Pos | C43H80NO8P  | 769.5606 | 769.5622 | 2.08 | 10.67 |
| 255 | PC (18:2/20:5)   | Pos | C46H78NO8P  | 803.5451 | 803.5465 | 1.75 | 9.19  |
| 256 | PC (O-14:1/16:0) | Pos | C38H76NO7P  | 689.5353 | 689.5359 | 0.83 | 11.07 |
| 257 | PC (18:0/18:1)   | Pos | C44H86NO8P  | 787.6080 | 787.6091 | 1.43 | 13.00 |
| 258 | PC (22:1/24:2)   | Pos | C54H102NO8P | 923.7329 | 923.7343 | 1.48 | 15.60 |
| 259 | PC (18:1/24:1)   | Pos | C50H96NO8P  | 869.6862 | 869.6874 | 1.37 | 14.82 |
| 260 | PC (20:4/22:6)   | Pos | C50H80NO8P  | 853.5606 | 853.5622 | 1.89 | 9.38  |
| 261 | PC (24:0/20:5)   | Pos | C52H94NO8P  | 891.6680 | 891.6717 | 4.16 | 14.80 |
| 262 | PC (20:5/22:6)   | Pos | C50H78NO8P  | 851.5450 | 851.5465 | 1.80 | 8.74  |
| 263 | PC (20:5/20:5)   | Pos | C48H76NO8P  | 825.5272 | 825.5309 | 4.53 | 8.36  |
| 264 | PC (20:0/22:6)   | Pos | C50H88NO8P  | 861.6236 | 861.6248 | 1.39 | 12.86 |
| 265 | PC (18:2/18:3)   | Pos | C44H78NO8P  | 779.5455 | 779.5465 | 1.35 | 9.32  |
| 266 | PC (20:2/22:5)   | Pos | C50H86NO8P  | 859.6077 | 859.6091 | 1.65 | 10.95 |
| 267 | PC (14:0/20:5)   | Pos | C42H74NO8P  | 751.5142 | 751.5152 | 1.29 | 8.86  |
| 268 | PC (26:0/18:1)   | Pos | C52H102NO8P | 899.7330 | 899.7343 | 1.42 | 16.33 |
| 269 | PC (16:0/16:1)   | Pos | C40H78NO8P  | 731.5456 | 731.5465 | 1.20 | 10.58 |
| 270 | PC (O-22:5/17:2) | Pos | C47H82NO7P  | 803.5819 | 803.5829 | 1.26 | 11.53 |
| 271 | PC (24:0/18:1)   | Pos | C50H98NO8P  | 871.7020 | 871.7030 | 1.18 | 15.65 |
| 272 | PC (16:0/19:0)   | Pos | C43H86NO8P  | 775.6082 | 775.6091 | 1.12 | 13.55 |
| 273 | PC (19:0/18:1)   | Pos | C45H88NO8P  | 801.6239 | 801.6248 | 1.19 | 13.63 |
| 274 | PC (24:1/24:1)   | Pos | C56H108NO8P | 953.7801 | 953.7813 | 1.25 | 16.75 |

|     |                                   |     |            |          |          |      |       |
|-----|-----------------------------------|-----|------------|----------|----------|------|-------|
| 275 | PC (19:1/22:6)                    | Pos | C49H84NO8P | 845.5918 | 845.5935 | 2.00 | 11.00 |
| 276 | PC (22:1/20:5)                    | Pos | C50H88NO8P | 861.6236 | 861.6248 | 1.39 | 12.31 |
| 277 | PC (23:0/22:6)                    | Pos | C53H94NO8P | 903.6705 | 903.6717 | 1.35 | 14.47 |
| 278 | PC (O-14:0/14:0)                  | Pos | C36H74NO7P | 663.5195 | 663.5203 | 1.24 | 10.07 |
| 279 | PC (13:0/16:0)                    | Pos | C37H74NO8P | 691.5141 | 691.5152 | 1.55 | 9.89  |
| 280 | PC (15:0/16:1)                    | Pos | C39H76NO8P | 717.5299 | 717.5309 | 1.37 | 9.99  |
| 281 | PC (18:0/20:5)                    | Pos | C46H82NO8P | 807.5765 | 807.5778 | 1.65 | 11.16 |
| 282 | PC (14:0/16:1)                    | Pos | C38H74NO8P | 703.5142 | 703.5152 | 1.45 | 9.43  |
| 283 | PC (O-18:0/18:0)                  | Pos | C44H90NO7P | 775.6447 | 775.6455 | 1.04 | 14.75 |
| 284 | PC (O-18:0/22:4)                  | Pos | C48H90NO7P | 823.6442 | 823.6455 | 1.53 | 13.56 |
| 285 | PC (23:0/20:5)                    | Pos | C51H92NO8P | 877.6545 | 877.6561 | 1.79 | 14.15 |
| 286 | PC (22:6/22:6)                    | Pos | C52H80NO8P | 877.5605 | 877.5622 | 1.96 | 9.14  |
| 287 | PC (24:1/22:6)                    | Pos | C54H94NO8P | 915.6708 | 915.6717 | 1.03 | 14.39 |
| 288 | PC (15:0/16:0)                    | Pos | C39H78NO8P | 719.5455 | 719.5465 | 1.36 | 11.05 |
| 289 | PC (18:2/18:2)                    | Pos | C44H80NO8P | 781.5591 | 781.5622 | 4.02 | 10.02 |
| 290 | PC (16:1/20:5)                    | Pos | C44H76NO8P | 777.5298 | 777.5309 | 1.43 | 9.00  |
| 291 | PC (O-18:0/16:0)                  | Pos | C42H86NO7P | 747.6132 | 747.6142 | 1.30 | 13.78 |
| 292 | PC (18:1/22:6)                    | Pos | C48H82NO8P | 831.5764 | 831.5778 | 1.74 | 10.44 |
| 293 | PC (21:0/18:1)                    | Pos | C47H92NO8P | 829.6551 | 829.6561 | 1.21 | 14.56 |
| 294 | PC(O-18:2(9Z,12Z)/18:2(9Z,12Z))   | Pos | C44H82NO7P | 767.5821 | 767.5829 | 1.07 | 13.63 |
| 295 | PC(O-22:0/18:3(6Z,9Z,12Z))        | Pos | C48H92NO7P | 825.6609 | 825.6611 | 0.27 | 14.03 |
| 296 | PC(O-18:2(9Z,12Z)/24:0)           | Pos | C50H98NO7P | 855.7071 | 855.7081 | 1.20 | 15.70 |
| 297 | PC(P-18:3(6Z,9Z,12Z)/16:0)        | Pos | C42H78NO7P | 739.5510 | 739.5516 | 0.77 | 12.28 |
| 298 | PC(O-18:2(9Z,12Z)/22:0)           | Pos | C48H94NO7P | 827.6752 | 827.6768 | 1.97 | 14.97 |
| 299 | PC(O-18:1(9Z)/18:2(9Z,12Z))       | Pos | C44H84NO7P | 769.5978 | 769.5985 | 0.97 | 13.83 |
| 300 | PC(22:0/18:3(9Z,12Z,15Z))         | Pos | C48H90NO8P | 839.6395 | 839.6404 | 1.13 | 14.95 |
| 301 | PC(P-18:3(6Z,9Z,12Z)/18:1(11Z))   | Neg | C44H80NO7P | 765.5701 | 765.5672 | 3.79 | 13.32 |
| 302 | PC(O-18:0/18:2(9Z,12Z))           | Neg | C44H86NO7P | 771.6165 | 771.6142 | 2.93 | 14.87 |
| 303 | PC(18:3(9Z,12Z,15Z)/18:2(9Z,12Z)) | Neg | C44H78NO8P | 779.5504 | 779.5465 | 4.94 | 11.75 |
| 304 | PC (16:0/14:0)                    | Neg | C48H94NO8P | 843.6755 | 843.6717 | 4.47 | 15.34 |

|     |                                             |     |            |          |          |      |       |
|-----|---------------------------------------------|-----|------------|----------|----------|------|-------|
| 305 | PC (18:2/16:0)                              | Neg | C42H81NO8P | 758.5669 | 758.5700 | 4.15 | 10.77 |
| 306 | PC(P-<br>20:5(5Z,8Z,11Z,14Z,17Z)/18:1(11Z)) | Neg | C46H80NO7P | 789.5708 | 789.5672 | 4.52 | 13.05 |
| 307 | PC (18:1/18:0)                              | Neg | C44H86NO8P | 787.6116 | 787.6091 | 3.19 | 14.57 |
| 308 | PC(P-<br>22:2(13Z,16Z)/18:1(11Z))           | Neg | C48H90NO7P | 823.6496 | 823.6455 | 4.92 | 14.53 |
| 309 | PE (O-18:2/24:0)                            | Pos | C47H92NO7P | 813.6600 | 813.6611 | 1.34 | 15.65 |
| 310 | PE (O-18:2/20:2)                            | Pos | C43H80NO7P | 753.5670 | 753.5672 | 0.21 | 12.93 |
| 311 | PE (O-18:5/20:1)                            | Pos | C43H76NO7P | 749.5351 | 749.5359 | 1.07 | 11.96 |
| 312 | PE (O-16:2/20:4)                            | Pos | C41H72NO7P | 721.5038 | 721.5046 | 1.15 | 10.70 |
| 313 | PE (O-16:2/22:3)                            | Pos | C43H78NO7P | 751.5505 | 751.5516 | 1.44 | 12.19 |
| 314 | PE (19:0/20:5)                              | Pos | C44H78NO8P | 779.5455 | 779.5465 | 1.24 | 11.99 |
| 315 | PE (18:4/20:4)                              | Pos | C43H70NO8P | 759.4827 | 759.4839 | 1.55 | 8.68  |
| 316 | PE (O-14:0/20:1)                            | Pos | C39H78NO7P | 703.5510 | 703.5516 | 0.92 | 12.83 |
| 317 | PE (O-16:0/16:2)                            | Pos | C37H72NO7P | 673.5039 | 673.5046 | 1.10 | 11.42 |
| 318 | PE (O-16:2/18:0)                            | Pos | C39H76NO7P | 701.5352 | 701.5359 | 0.98 | 11.87 |
| 319 | PE (18:2/19:2)                              | Pos | C42H76NO8P | 753.5300 | 753.5309 | 1.17 | 11.48 |
| 320 | PE (O-18:2/20:0)                            | Pos | C43H84NO7P | 757.5976 | 757.5985 | 1.19 | 14.54 |
| 321 | PE (22:1/24:2)                              | Pos | C51H96NO8P | 881.6864 | 881.6874 | 1.19 | 15.45 |
| 322 | PE (O-18:3/20:0)                            | Pos | C43H82NO7P | 755.5821 | 755.5829 | 1.05 | 13.85 |
| 323 | PE (O-18:5/20:0)                            | Pos | C43H78NO7P | 751.5522 | 751.5516 | 0.76 | 11.72 |
| 324 | PE (16:0/16:1)                              | Pos | C37H72NO8P | 689.4985 | 689.4996 | 1.65 | 10.82 |
| 325 | PE (16:0/16:0)                              | Pos | C37H74NO8P | 691.5132 | 691.5152 | 2.85 | 11.91 |
| 326 | PE (18:0/20:5)                              | Pos | C43H76NO8P | 765.5302 | 765.5309 | 0.91 | 11.36 |
| 327 | PE (O-18:1/22:4)                            | Pos | C45H82NO7P | 779.5827 | 779.5829 | 0.28 | 12.97 |
| 328 | PE (16:0/20:4)                              | Pos | C41H74NO8P | 739.5144 | 739.5152 | 1.10 | 10.88 |
| 329 | PE (16:0/18:1)                              | Pos | C39H76NO8P | 717.5302 | 717.5309 | 0.95 | 11.96 |
| 330 | PE (16:0/18:2)                              | Pos | C39H74NO8P | 715.5143 | 715.5152 | 1.27 | 11.04 |
| 331 | PE (16:0/22:1)                              | Pos | C43H84NO8P | 773.5958 | 773.5935 | 2.99 | 3.60  |
| 332 | PE (18:2/18:2)                              | Pos | C41H74NO8P | 739.5148 | 739.5152 | 0.51 | 15.41 |
| 333 | PE (19:5/22:6)                              | Pos | C47H72NO8P | 809.4984 | 809.4996 | 1.51 | 8.89  |
| 334 | PE (18:1/16:0)                              | Pos | C41H76NO8P | 741.5296 | 741.5309 | 1.74 | 15.63 |
| 335 | PE (18:0/20:4)                              | Neg | C43H78NO8P | 767.5488 | 767.5465 | 3.02 | 12.14 |
| 336 | PE (O-18:0/20:5)                            | Neg | C43H78NO7P | 751.5543 | 751.5516 | 3.57 | 12.21 |
| 337 | PE (16:1/20:5)                              | Neg | C41H70NO8P | 735.4867 | 735.4839 | 3.83 | 9.16  |
| 338 | PE (O-14:1/20:4)                            | Neg | C39H70NO7P | 695.4911 | 695.4890 | 3.06 | 10.27 |
| 339 | PE (25:0/18:1)                              | Neg | C48H94NO8P | 843.6745 | 843.6717 | 3.35 | 15.78 |
| 340 | PE (18:1/22:1)                              | Neg | C45H86NO8P | 799.6118 | 799.6091 | 3.43 | 14.11 |
| 341 | PE (17:0/20:5)                              | Neg | C42H74NO8P | 751.5176 | 751.5152 | 3.18 | 10.77 |
| 342 | PE (17:0/16:1)                              | Neg | C38H74NO8P | 703.5173 | 703.5152 | 2.93 | 11.43 |
| 343 | PE (23:0/18:1)                              | Neg | C46H90NO8P | 815.6430 | 815.6404 | 3.21 | 15.23 |

|     |                  |     |            |          |          |      |       |
|-----|------------------|-----|------------|----------|----------|------|-------|
| 344 | PE (18:1/20:2)   | Neg | C43H80NO8P | 769.5646 | 769.5622 | 3.11 | 10.90 |
| 345 | PE (O-18:1/20:2) | Neg | C43H82NO7P | 755.5855 | 755.5829 | 3.39 | 13.85 |
| 346 | PE (O-18:1/24:2) | Neg | C47H90NO7P | 811.6486 | 811.6455 | 3.79 | 15.23 |
| 347 | PE (19:0/18:1)   | Neg | C42H82NO8P | 759.5806 | 759.5778 | 3.66 | 13.65 |
| 348 | PE (O-18:3/20:5) | Neg | C43H72NO7P | 745.5072 | 745.5046 | 3.53 | 9.87  |
| 349 | PE (O-16:2/20:5) | Neg | C41H70NO7P | 719.4914 | 719.4890 | 3.36 | 9.65  |
| 350 | PE (16:0/22:0)   | Neg | C43H86NO8P | 775.6113 | 775.6091 | 2.89 | 14.88 |
| 351 | PE (O-18:1/22:6) | Neg | C45H78NO7P | 775.5540 | 775.5516 | 3.08 | 12.42 |
| 352 | PE (O-16:1/18:3) | Neg | C39H72NO7P | 697.5069 | 697.5046 | 3.23 | 10.92 |
| 353 | PE (O-16:1/16:1) | Neg | C37H72NO7P | 673.5070 | 673.5046 | 3.49 | 11.45 |
| 354 | PE (O-18:0/20:2) | Neg | C43H84NO7P | 757.6009 | 757.5985 | 3.22 | 14.00 |
| 355 | PE (20:5/22:6)   | Neg | C47H72NO8P | 809.5021 | 809.4996 | 3.10 | 8.90  |
| 356 | PE (18:3/20:5)   | Neg | C43H70NO8P | 759.4865 | 759.4839 | 3.45 | 8.68  |
| 357 | PE (16:0/26:0)   | Neg | C47H94NO8P | 831.6747 | 831.6717 | 3.57 | 16.00 |
| 358 | PE (O-18:1/22:1) | Neg | C45H88NO7P | 785.6323 | 785.6298 | 3.14 | 15.14 |
| 359 | PE (O-18:1/20:5) | Neg | C43H76NO7P | 749.5382 | 749.5359 | 3.10 | 11.99 |
| 360 | PE (O-18:1/20:1) | Neg | C43H84NO7P | 757.6010 | 757.5985 | 3.27 | 14.55 |
| 361 | PE (O-16:0/20:4) | Neg | C41H76NO7P | 725.5386 | 725.5359 | 3.74 | 11.72 |
| 362 | PE (O-18:1/18:0) | Neg | C41H82NO7P | 731.5857 | 731.5829 | 3.85 | 14.55 |
| 363 | PE (20:0/18:1)   | Neg | C43H84NO8P | 773.5961 | 773.5935 | 3.37 | 14.15 |
| 364 | PE (O-18:1/16:0) | Neg | C39H78NO7P | 703.5539 | 703.5516 | 3.23 | 13.70 |
| 365 | PE (O-18:0/22:4) | Neg | C45H84NO7P | 781.6013 | 781.5985 | 3.58 | 13.65 |
| 366 | PE (O-14:1/18:2) | Neg | C37H70NO7P | 671.4908 | 671.4890 | 2.65 | 10.46 |
| 367 | PE (O-18:1/19:0) | Neg | C42H84NO7P | 745.6011 | 745.5985 | 3.54 | 14.78 |
| 368 | PE (18:1/26:1)   | Neg | C49H94NO8P | 855.6746 | 855.6717 | 3.37 | 15.37 |
| 369 | PE (O-16:1/18:1) | Neg | C39H76NO7P | 701.5385 | 701.5359 | 3.68 | 12.64 |
| 370 | PE (19:0/20:2)   | Neg | C44H84NO8P | 785.5963 | 785.5935 | 3.50 | 13.97 |
| 371 | PE (17:1/22:6)   | Neg | C44H74NO8P | 775.5179 | 775.5152 | 3.42 | 10.28 |
| 372 | PE (O-18:1/11:0) | Neg | C34H68NO7P | 633.4754 | 633.4733 | 3.35 | 10.91 |
| 373 | PE (20:1/20:2)   | Neg | C45H84NO8P | 797.5970 | 797.5935 | 4.43 | 13.31 |
| 374 | PE (18:0/18:3)   | Neg | C41H76NO8P | 741.5332 | 741.5309 | 3.12 | 10.11 |
| 375 | PE (17:1/18:2)   | Neg | C40H74NO8P | 727.5175 | 727.5152 | 3.20 | 10.72 |
| 376 | PE (O-16:0/18:2) | Neg | C39H76NO7P | 701.5385 | 701.5359 | 3.69 | 11.89 |
| 377 | PE (26:0/18:1)   | Neg | C49H96NO8P | 857.6902 | 857.6874 | 3.29 | 16.01 |
| 378 | PE (22:0/20:4)   | Neg | C47H86NO8P | 823.6117 | 823.6091 | 3.10 | 14.27 |
| 379 | PE (16:0/17:0)   | Neg | C38H76NO8P | 705.5330 | 705.5309 | 2.93 | 12.37 |
| 380 | PE (O-18:0/20:4) | Neg | C43H80NO7P | 753.5699 | 753.5672 | 3.57 | 11.46 |
| 381 | PE (O-18:1/22:0) | Neg | C45H90NO7P | 787.6484 | 787.6455 | 3.67 | 15.78 |
| 382 | PE (15:0/20:5)   | Neg | C40H70NO8P | 723.4860 | 723.4839 | 2.87 | 9.61  |
| 383 | PE (20:5/20:5)   | Neg | C45H70NO8P | 783.4866 | 783.4839 | 3.46 | 8.50  |
| 384 | PE (O-18:1/26:1) | Neg | C49H96NO7P | 841.6952 | 841.6924 | 3.37 | 16.13 |
| 385 | PE (O-14:1/16:0) | Neg | C35H70NO7P | 647.4914 | 647.4890 | 3.68 | 11.36 |
| 386 | PE (O-18:2/20:5) | Neg | C43H74NO7P | 747.5230 | 747.5203 | 3.55 | 10.73 |

|     |                  |     |             |          |          |      |       |
|-----|------------------|-----|-------------|----------|----------|------|-------|
| 387 | PE (19:1/18:2)   | Neg | C42H78NO8P  | 755.5489 | 755.5465 | 3.18 | 11.93 |
| 388 | PE (17:0/22:6)   | Neg | C44H76NO8P  | 777.5340 | 777.5309 | 3.97 | 11.07 |
| 389 | PE (O-18:0/18:2) | Neg | C41H80NO7P  | 729.5696 | 729.5672 | 3.32 | 13.13 |
| 390 | PE (O-18:1/20:4) | Neg | C43H78NO7P  | 751.5543 | 751.5516 | 3.58 | 12.73 |
| 391 | PE (18:0/20:2)   | Neg | C43H82NO8P  | 771.5808 | 771.5778 | 3.85 | 13.33 |
| 392 | PE (O-18:1/24:1) | Neg | C47H92NO7P  | 813.6638 | 813.6611 | 3.32 | 15.67 |
| 393 | PE (18:0/18:1)   | Neg | C41H80NO8P  | 745.5650 | 745.5622 | 3.81 | 13.19 |
| 394 | PE (19:0/20:4)   | Neg | C44H80NO8P  | 781.5638 | 781.5622 | 2.02 | 12.76 |
| 395 | PE (O-18:0/16:1) | Neg | C39H78NO7P  | 703.5539 | 703.5516 | 3.23 | 12.86 |
| 396 | PE (O-16:1/17:1) | Neg | C38H74NO7P  | 687.5223 | 687.5203 | 2.87 | 12.08 |
| 397 | PE (20:0/20:4)   | Neg | C45H82NO8P  | 795.5799 | 795.5778 | 2.65 | 13.33 |
| 398 | PE (O-16:1/18:2) | Neg | C39H74NO7P  | 699.5226 | 699.5203 | 3.26 | 11.72 |
| 399 | PE (18:2/18:3)   | Neg | C41H72NO8P  | 737.5022 | 737.4996 | 3.55 | 9.48  |
| 400 | PE (17:0/18:1)   | Neg | C40H78NO8P  | 731.5475 | 731.5465 | 1.37 | 11.05 |
| 401 | PE (15:0/18:2)   | Neg | C38H72NO8P  | 701.5018 | 701.4996 | 3.14 | 10.48 |
| 402 | PE (22:0/18:2)   | Neg | C45H86NO8P  | 799.6118 | 799.6091 | 3.36 | 14.40 |
| 403 | PE (O-16:1/20:5) | Neg | C41H72NO7P  | 721.5070 | 721.5046 | 3.37 | 10.72 |
| 404 | PE (O-18:1/21:0) | Neg | C44H88NO7P  | 773.6324 | 773.6298 | 3.36 | 15.50 |
| 405 | PE (18:2/20:2)   | Neg | C43H78NO8P  | 767.5483 | 767.5465 | 2.37 | 10.03 |
| 406 | PE (O-18:1/18:2) | Neg | C41H78NO7P  | 727.5545 | 727.5516 | 3.94 | 12.94 |
| 407 | PE (O-14:1/20:5) | Neg | C39H68NO7P  | 693.4755 | 693.4733 | 3.13 | 9.53  |
| 408 | PE (16:0/20:0)   | Neg | C41H82NO8P  | 747.5807 | 747.5778 | 3.87 | 12.92 |
| 409 | PE (O-18:1/24:0) | Neg | C47H94NO7P  | 815.6798 | 815.6768 | 3.69 | 16.26 |
| 410 | PE (O-16:1/15:0) | Neg | C36H72NO7P  | 661.5067 | 661.5046 | 3.14 | 11.88 |
| 411 | PE (19:0/18:2)   | Neg | C42H80NO8P  | 757.5647 | 757.5622 | 3.34 | 12.76 |
| 412 | PE (24:1/24:1)   | Neg | C53H102NO8P | 911.7369 | 911.7343 | 2.87 | 16.24 |
| 413 | PE (O-16:1/20:4) | Neg | C41H74NO7P  | 723.5229 | 723.5203 | 3.54 | 11.49 |
| 414 | PE (16:0/24:0)   | Neg | C45H90NO8P  | 803.6432 | 803.6404 | 3.46 | 15.49 |
| 415 | PE (21:0/18:1)   | Neg | C44H86NO8P  | 787.6122 | 787.6091 | 3.89 | 13.62 |
| 416 | PE (18:0/18:2)   | Neg | C41H78NO8P  | 743.5492 | 743.5465 | 3.62 | 12.30 |
| 417 | PE (18:1/18:2)   | Neg | C41H76NO8P  | 741.5336 | 741.5309 | 3.59 | 11.18 |
| 418 | PE (O-18:0/17:1) | Neg | C40H80NO7P  | 717.5698 | 717.5672 | 3.68 | 13.42 |
| 419 | PE (O-18:1/22:2) | Neg | C45H86NO7P  | 783.6168 | 783.6142 | 3.34 | 14.58 |
| 420 | PE (O-16:0/20:5) | Neg | C41H74NO7P  | 723.5229 | 723.5203 | 3.55 | 10.94 |
| 421 | PE (17:0/18:0)   | Neg | C40H80NO8P  | 733.5645 | 733.5622 | 3.09 | 13.44 |
| 422 | PE (O-16:0/22:6) | Neg | C43H76NO7P  | 749.5381 | 749.5359 | 2.95 | 11.45 |
| 423 | PE (O-18:1/22:5) | Neg | C45H80NO7P  | 777.5701 | 777.5672 | 3.68 | 12.68 |
| 424 | PE (O-16:1/11:0) | Neg | C32H64NO7P  | 605.4437 | 605.4420 | 2.76 | 9.60  |
| 425 | PE (22:6/22:6)   | Neg | C49H74NO8P  | 835.5180 | 835.5152 | 3.33 | 9.30  |
| 426 | PE (16:0/22:6)   | Neg | C43H74NO8P  | 763.5177 | 763.5152 | 3.25 | 10.64 |
| 427 | PE (18:1/24:1)   | Neg | C47H90NO8P  | 827.6432 | 827.6404 | 3.42 | 14.78 |
| 428 | PE (O-18:1/17:0) | Neg | C40H80NO7P  | 717.5698 | 717.5672 | 3.68 | 14.01 |
| 429 | PE (16:0/20:5)   | Neg | C41H72NO8P  | 737.5021 | 737.4996 | 3.43 | 10.16 |

|     |                       |     |             |          |          |      |       |
|-----|-----------------------|-----|-------------|----------|----------|------|-------|
| 430 | PE (18:1/26:2)        | Neg | C49H92NO8P  | 853.6585 | 853.6561 | 2.78 | 14.89 |
| 431 | PE (O-18:1/18:1)      | Neg | C41H80NO7P  | 729.5696 | 729.5672 | 3.30 | 13.73 |
| 432 | PE (18:1/22:6)        | Neg | C45H76NO8P  | 789.5335 | 789.5309 | 3.33 | 10.68 |
| 433 | PE (16:0/18:0)        | Neg | C39H78NO8P  | 719.5494 | 719.5465 | 3.96 | 13.13 |
| 434 | PE (18:2/20:5)        | Neg | C43H72NO8P  | 761.5019 | 761.4996 | 3.03 | 9.35  |
| 435 | PE (18:0/22:6)        | Neg | C45H78NO8P  | 791.5491 | 791.5465 | 3.28 | 11.84 |
| 436 | PE (18:1/24:2)        | Neg | C47H88NO8P  | 825.6278 | 825.6248 | 3.59 | 14.23 |
| 437 | PE (22:0/18:1)        | Neg | C45H88NO8P  | 801.6274 | 801.6248 | 3.18 | 14.91 |
| 438 | PE (O-18:0/18:1)      | Neg | C41H82NO7P  | 731.5857 | 731.5829 | 3.85 | 13.89 |
| 439 | PE (18:2/22:6)        | Neg | C45H74NO8P  | 787.5180 | 787.5152 | 3.50 | 9.78  |
| 440 | PE (O-18:1/18:3)      | Neg | C41H76NO7P  | 725.5386 | 725.5359 | 3.67 | 12.18 |
| 441 | PE (O-16:1/16:0)      | Neg | C37H74NO7P  | 675.5223 | 675.5203 | 3.01 | 12.58 |
| 442 | PE (20:4/22:6)        | Neg | C47H74NO8P  | 811.5176 | 811.5152 | 2.97 | 9.56  |
| 443 | PE (16:0/18:3)        | Neg | C39H72NO8P  | 713.5023 | 713.4996 | 3.83 | 10.30 |
| 444 | PE (24:0/18:1)        | Neg | C47H92NO8P  | 829.6591 | 829.6561 | 3.56 | 15.50 |
| 445 | PE (20:2/22:1)        | Neg | C41H70NO8P  | 735.4865 | 735.4839 | 3.51 | 9.82  |
| 446 | PE (13:0/13:0)        | Neg | C37H74NO7P  | 675.5223 | 675.5203 | 2.93 | 10.66 |
| 447 | PE (16:0/18:5)        | Neg | C33H66NO8P  | 635.4547 | 635.4526 | 3.37 | 7.34  |
| 448 | PI (16:0/20:5)        | Neg | C45H77O13P  | 856.5127 | 856.5102 | 2.94 | 9.19  |
| 449 | PI (18:1/20:5)        | Neg | C47H79O13P  | 882.5284 | 882.5258 | 2.96 | 9.26  |
| 450 | PI (18:2/20:5)        | Neg | C47H77O13P  | 880.5123 | 880.5102 | 2.43 | 8.56  |
| 451 | PI (18:0/20:4)        | Neg | C47H83O13P  | 886.5599 | 886.5571 | 3.12 | 11.02 |
| 452 | PI (16:0/20:4)        | Neg | C45H79O13P  | 858.5282 | 858.5258 | 2.83 | 9.84  |
| 453 | PI (18:0/20:5)        | Neg | C47H81O13P  | 884.5442 | 884.5415 | 3.10 | 10.31 |
| 454 | PS (19:2/19:2)        | Pos | C44H78NO10P | 811.5348 | 811.5363 | 1.91 | 11.09 |
| 455 | PS (20:3/20:3)        | Pos | C46H78NO10P | 835.5348 | 835.5363 | 1.86 | 10.82 |
| 456 | PS (18:0/18:1)        | Pos | C42H80NO10P | 789.5507 | 789.5520 | 1.63 | 12.11 |
| 457 | PS (18:1/20:4)        | Pos | C44H76NO10P | 809.5200 | 809.5207 | 0.89 | 6.71  |
| 458 | PS (18:0/20:3)        | Pos | C44H80NO10P | 813.5508 | 813.5520 | 1.51 | 8.01  |
| 459 | PS(16:0/16:1(9Z))     | Pos | C38H72NO10P | 733.4886 | 733.4894 | 1.05 | 7.13  |
| 460 | PS (16:0/20:4)        | Neg | C42H74NO10P | 783.5072 | 783.5050 | 2.74 | 9.95  |
| 461 | PS (18:2/22:6)        | Neg | C46H74NO10P | 831.5065 | 831.5050 | 1.78 | 8.98  |
| 462 | PS (16:0/22:6)        | Neg | C44H74NO10P | 807.5079 | 807.5050 | 3.57 | 9.70  |
| 463 | PS (18:0/18:2)        | Neg | C42H78NO10P | 787.5396 | 787.5363 | 4.19 | 11.30 |
| 464 | PS (20:4/20:5)        | Neg | C46H72NO10P | 829.4926 | 829.4894 | 3.82 | 8.40  |
| 465 | PS (18:2/20:5)        | Neg | C44H72NO10P | 805.4928 | 805.4894 | 4.16 | 8.58  |
| 466 | PS (20:5/22:6)        | Neg | C48H72NO10P | 853.4922 | 853.4894 | 3.25 | 8.20  |
| 467 | PS (16:0/20:5)        | Neg | C42H72NO10P | 781.4920 | 781.4894 | 3.28 | 9.28  |
| 468 | PS (18:1/22:6)        | Neg | C46H76NO10P | 833.5232 | 833.5207 | 3.01 | 9.74  |
| 469 | PS (18:0/22:6)        | Neg | C46H78NO10P | 835.5392 | 835.5363 | 3.42 | 10.87 |
| 470 | PS (22:6/22:6)        | Neg | C50H74NO10P | 879.5083 | 879.5050 | 3.70 | 8.56  |
| 471 | PS (18:0/20:5)        | Neg | C44H76NO10P | 809.5237 | 809.5207 | 3.72 | 10.43 |
| 472 | PS(18:2(9Z,12Z)/18:2( | Neg | C42H74NO10P | 783.5078 | 783.5050 | 3.52 | 8.00  |

|     |                       |     |             |          |          |      |       |
|-----|-----------------------|-----|-------------|----------|----------|------|-------|
|     | 9Z,12Z))              |     |             |          |          |      |       |
| 473 | PS (18:0/20:4)        | Neg | C44H78NO10P | 811.5388 | 811.5363 | 3.04 | 8.33  |
| 474 | PS (12:0/12:0)        | Neg | C30H58NO10P | 623.3795 | 623.3798 | 0.42 | 5.70  |
| 475 | PS (18:1/16:0)        | Neg | C42H76NO10P | 785.5232 | 785.5207 | 3.23 | 7.96  |
| 476 | PS (18:1/18:1)        | Neg | C42H78NO10P | 787.5392 | 787.5363 | 3.68 | 8.85  |
| 477 | PS(16:1(9Z)/18:1(9Z)) | Neg | C40H74NO10P | 759.5075 | 759.5050 | 3.32 | 7.92  |
| 478 | SM (d25:0/14:0)       | Pos | C44H91N2O6P | 774.6605 | 774.6615 | 1.29 | 14.01 |
| 479 | SM (d18:1/14:1)       | Pos | C37H73N2O6P | 672.5200 | 672.5206 | 0.88 | 8.99  |
| 480 | SM (d21:0/19:1)       | Pos | C45H91N2O6P | 786.6605 | 786.6615 | 1.22 | 13.33 |
| 481 | SM (d24:0/15:1)       | Pos | C44H89N2O6P | 772.6449 | 772.6458 | 1.22 | 12.75 |
| 482 | SM (d24:0/12:0)       | Pos | C41H85N2O6P | 732.6137 | 732.6145 | 1.08 | 12.37 |
| 483 | SM (d22:0/13:0)       | Pos | C40H83N2O6P | 718.5976 | 718.5989 | 1.78 | 11.54 |
| 484 | SM (d22:1/12:0)       | Pos | C39H79N2O6P | 702.5667 | 702.5676 | 1.34 | 10.49 |
| 485 | SM (d24:1/12:0)       | Pos | C41H83N2O6P | 730.5981 | 730.5989 | 1.08 | 11.95 |
| 486 | SM (d27:1/12:0)       | Pos | C44H89N2O6P | 772.6448 | 772.6458 | 1.24 | 13.68 |
| 487 | SM (d15:0/26:0)       | Pos | C46H95N2O6P | 802.6918 | 802.6928 | 1.31 | 14.82 |
| 488 | SM (d15:1/21:1)       | Pos | C41H81N2O6P | 728.5825 | 728.5832 | 0.99 | 10.54 |
| 489 | SM (d17:0/13:1)       | Pos | C35H71NO6P  | 646.5042 | 646.5050 | 1.18 | 8.16  |
| 490 | SM (d18:1/22:1)       | Pos | C45H89N2O6P | 784.6451 | 784.6458 | 0.85 | 12.88 |
| 491 | SM (d20:1/12:0)       | Pos | C37H75N2O6P | 674.5353 | 674.5363 | 1.54 | 9.34  |
| 492 | SM (d21:2/21:0)       | Pos | C47H93N2O6P | 812.6762 | 812.6771 | 1.11 | 13.93 |
| 493 | SM (d24:1/18:2)       | Pos | C47H91N2O6P | 810.6595 | 810.6615 | 2.48 | 13.02 |
| 494 | SM (d20:0/14:0)       | Pos | C39H81N2O6P | 704.5822 | 704.5832 | 1.43 | 11.01 |
| 495 | SM (d26:1/12:0)       | Pos | C43H87N2O6P | 758.6294 | 758.6302 | 1.07 | 12.20 |
| 496 | SM (d19:1/24:0)       | Pos | C48H97N2O6P | 828.7074 | 828.7084 | 1.22 | 15.23 |
| 497 | SM (d21:0/20:2)       | Pos | C46H91N2O6P | 798.6575 | 798.6615 | 4.98 | 14.29 |
| 498 | SM (d27:2/12:0)       | Pos | C44H87N2O6P | 770.6291 | 770.6302 | 1.49 | 13.30 |
| 499 | SM (d23:3/15:0)       | Pos | C43H83N2O6P | 754.5982 | 754.5989 | 0.94 | 10.71 |
| 500 | SM (d18:0/20:2)       | Pos | C43H85N2O6P | 756.6137 | 756.6145 | 1.06 | 11.77 |
| 501 | SM (d18:0/15:0)       | Pos | C38H79N2O6P | 690.5666 | 690.5676 | 1.42 | 10.35 |
| 502 | SM (d16:0/14:0)       | Pos | C35H73N2O6P | 648.5204 | 648.5206 | 0.26 | 8.55  |
| 503 | SM (d26:0/12:1)       | Pos | C43H87N2O6P | 758.6294 | 758.6302 | 1.01 | 13.13 |
| 504 | SM (d24:1/13:0)       | Pos | C42H85N2O6P | 744.6139 | 744.6145 | 0.77 | 12.62 |
| 505 | SM (d22:0/20:1)       | Pos | C47H95N2O6P | 814.6920 | 814.6928 | 0.98 | 14.26 |
| 506 | SM (d26:1/14:0)       | Pos | C45H91N2O6P | 786.6605 | 786.6615 | 1.23 | 14.18 |
| 507 | SM (d18:0/13:1)       | Pos | C36H73N2O6P | 660.5198 | 660.5206 | 1.23 | 8.76  |
| 508 | SM (d25:1/19:0)       | Pos | C49H99N2O6P | 842.7231 | 842.7241 | 1.15 | 15.01 |
| 509 | SM (d25:0/13:0)       | Pos | C43H89N2O6P | 760.6448 | 760.6458 | 1.30 | 13.52 |
| 510 | SM (d15:1/28:1)       | Pos | C48H95N2O6P | 826.6921 | 826.6928 | 0.91 | 14.32 |
| 511 | SM (d20:0/17:0)       | Pos | C42H87N2O6P | 746.6295 | 746.6302 | 0.94 | 13.00 |
| 512 | SM (d23:1/12:0)       | Pos | C40H81N2O6P | 716.5823 | 716.5832 | 1.28 | 11.11 |
| 513 | SM (d15:0/26:1)       | Pos | C46H93N2O6P | 800.6760 | 800.6771 | 1.32 | 13.82 |
| 514 | SM (d19:2/18:0)       | Pos | C42H83N2O6P | 742.5975 | 742.5989 | 1.90 | 11.14 |

|     |                 |     |             |          |          |      |       |
|-----|-----------------|-----|-------------|----------|----------|------|-------|
| 515 | SM (d17:2/22:0) | Pos | C44H87N2O6P | 770.6294 | 770.6302 | 0.99 | 12.31 |
| 516 | SM (d21:1/12:0) | Pos | C38H77N2O6P | 688.5509 | 688.5519 | 1.52 | 9.93  |
| 517 | SM (d28:3/12:0) | Pos | C45H87N2O6P | 782.6296 | 782.6302 | 0.82 | 11.84 |
| 518 | SM (d14:0/18:0) | Pos | C37H77N2O6P | 676.5509 | 676.5519 | 1.43 | 9.74  |

Note: "O-" for plasmany species, and "P-" for plasmenyl species.