

| <u>Identification #</u> | <u>Lipid</u>     | <u>Lipid Class</u>           |
|-------------------------|------------------|------------------------------|
| P726.5442/11.0          | PE O-22:4_14:0   | Phosphatidylethanolamine     |
| N1052.677/16            | Hex2Cer 40:2; O6 | Hexosylceramide              |
| N803.5891/13.5          | EPC 40:2; O3     | Ceramide phosphoethanolamine |
| P813.6867/14.1          | SM d24:0_18:2    | Sphingomyelin                |
| N723.4963/8.35          | PA 19:2_19:2     | Phosphatidic Acid            |
| N913.6994/16.5          | SM 45:3; O3      | Sphingomyelins               |
| N956.6584/15.2          | IPC 46:4; O3     | Ceramide phosphoinositol     |
| N970.6746/15.7          | IPC 47:4; O3     | Ceramide phosphoinositol     |
| P454.3686/2.49          | ST 30:5; O2      | Sterol                       |
| P458.4204/4.19          | DG O-24:1        | Diacyl glycerol              |
| N831.6213/14.7          | EPC 42:2; O3     | Ceramide phosphoethanolamine |
| P815.7027/14.6          | SM d29:0_13:1    | Sphingomyelin                |
| N701.5112/10.0          | PA 36:1          | Phosphatidic Acid            |
| N984.6901/16.1          | IPC 48:4; O3     | Ceramide phosphoinositol     |
| P776.6239/13.4          | HexCer 37:0; O4  | Hexosylceramide              |

**Table S1:** Fifteen most important lipids identified from quantitative lipidomics screen in the SVZ of adult SR <sup>flox/flox</sup> and Nestin-Cre+ mice. Table shows identified lipid followed by lipid class.