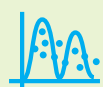


Ceramides + Globosides



Deliverables

This pre-validated panel includes 5 ceramide and 2 globoside classes for which 12 species are reported (84 in total). **Fully quantitative results** are provided for each species (expressed in pmol). In addition, the amount of each sample used is reported (weight or volume).



Method

Ceramides and Globosides are analysed by **LC/ESI-MS/MS** with an Agilent 1290 HPLC system combined with an Agilent 6470 Triplequad mass spectrometer (Agilent Technologies, Santa Clara, USA). Samples are extracted with organic solvents. For lipid quantification, deuterated internal standards are added prior to sample extraction. Clean extracts are loaded on the LC system for LC/ESI-MS/MS analysis. Mass spectrometry analysis is performed with multiple reaction monitoring (MRM) in positive ion mode with at least two mass transitions for each compound. Data analysis is done using Mass Hunter software (Agilent Technologies).



Sample submission guidelines

| SAMPLE TYPE | SAMPLE AMOUNT | SHIPMENT CONDITIONS |
|----------------------------------|---|---------------------------|
| Blood plasma | 100 µl | <i>Frozen, on dry ice</i> |
| Tissue | 20 mg | <i>Frozen, on dry ice</i> |
| Cells | 1 × 10 ⁶ cells or 150 µg of total protein | <i>Frozen, on dry ice</i> |
| CSF (cerebrospinal fluid) | 300 µl | <i>Frozen, on dry ice</i> |

Minimal sample number: 10

Standard turnaround time: 6 weeks

(for projects with up to 100 samples)

Expedited delivery is possible for an additional fee.

Applications

- > Gaucher's disease
- > Niemann-Pick disease type C
- > Krabbe's disease
- > Fabry's disease
- > Alzheimer's, Parkinson's, Huntington's diseases

Covered analytes

| ANALYTE | LONG CHAIN BASE* | FATTY ACID* |
|--|------------------|-------------|
| Ceramide – Cer | d18:1 | 16:0 |
| Ceramide-1-phosphate – CerP | | 18:0 |
| Hexosylceramide – HexCer | | 20:0 |
| Lactosylceramide – LacCer | | 21:0 |
| Globotriaosylceramide – GB3 | | 22:0 |
| Lyso-globotriaosylceramide – Lyso-GB3 | | 22:1 |
| | | 23:0 |
| | | 24:0 |
| | | 24:1 |
| | | 24:2 |
| | | 26:0 |
| | | 26:1 |
| Dihydroceramide – dhCer | d18:0 | |

* Coverage can be extended by other species (including additional long chain bases and fatty acids).

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