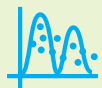


## Endocannabinoids



### Deliverables

This pre-validated panel includes 13 endocannabinoids and allows delivery of **fully quantitative results** (expressed in pmol). In addition, the amount of each sample used is provided (weight or volume).



### Method

Endocannabinoids are analysed by **LC/ESI-MS/MS** with an Agilent 1290 HPLC system combined with an Agilent 6495 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. Crude extracts are further purified by solid phase extraction (SPE). 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 negative 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
<b>Whole blood, plasma, serum</b>	500 µl	<i>Frozen, on dry ice</i>
<b>Tissue</b>	50 mg	<i>Frozen pieces of tissues, on dry ice</i>
<b>Cells</b>	3 × 10 <sup>6</sup> cells or 500 µg of total protein	<i>Frozen cell pellet, on dry ice</i>
<b>Liquids</b> (e.g., cell supernatant, media)	0.5–20 ml	<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

- > Multiple sclerosis
- > Neurodegenerative diseases
- > Neuroendocrine processes
- > Chronic liver disease
- > Regulation of appetite

## Covered analytes

ANALYTE	FATTY ACID
<b>2-Arachidonylglycerol/2AG</b>	MG 20:4
<b>C14:0 Ethanol amide</b>	C14:0
<b>C16:0 Ethanol amide/PEA</b>	C16:0
<b>C16:1 Ethanol amide</b>	C16:1
<b>C18:0 Ethanol amide</b>	C18:0
<b>C18:1 Ethanol amide/OEA</b>	C18:1
<b>C18:2 Ethanol amide</b>	C18:2 n-6
<b>C18:3 Ethanol amide</b>	C18:3 n-3
<b>C20:3 Ethanolamide</b>	C20:3
<b>C20:4 Ethanol amide/ Anandamide</b>	C20:4 n-6
<b>C20:5 Ethanol amide</b>	C20:5 n-3
<b>C22:4 Ethanolamide</b>	C22:4
<b>C22:6 Ethanol amide/ Synaptamide</b>	C22:6 n-3

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