

Sphingosine + Sphinganine



Deliverables

This pre-validated panel includes saturated and unsaturated sphingoid bases (sphingosine and sphinganine) and their phosphorylated derivatives (4 species in total). The **fully quantitative results** are provided for each species (expressed in pmol). In addition, the amount of each sample used is reported (weight or volume). Extended coverage specific for *D. melanogaster* is also available on request.



Method

Sphingosines 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. Clean extracts are loaded on the LC system (Kinetex EVO column) 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 μΙ	Frozen, on dry ice
Tissue	20 mg	Frozen, on dry ice
Cells	1×10^6 cells <i>or</i> 150 µg of total protein	Frozen, on dry ice
CSF (cerebrospinal fluid)	300 μΙ	Frozen, on dry ice
D. melanogaster	1 fly	Frozen, on dry ice

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

- Neurodegenerative diseases
- Amyotrophic lateral sclerosis
- > Atherosclerosis
- > Cancer
- > Atopic dermatitis

Covered analytes

LONG CHAIN BASE **ANALYTE**

Sphingosine	d18:1	
Sphingosine-1-phosphate		
	d14:1*	
	d14:0*	
	d16:1*	
	d16:0*	

^{*} Extended coverage, specific to D. melanogaster









