TECH SHEET



Oxycholesterols



Deliverables

This pre-validated panel covers 17 oxycholesterols metabolites including side chain and ring oxidation. It offers **fully quantitative results** (expressed in pmol) and the amount of each sample used is provided (weight or volume). Depending on customer needs, information on the free or total form of oxycholesterols is provided.



Method

Oxycholesterols are analysed by **LC/APCI-MS/MS** with an Agilent 1290 HPLC system combined with an Agilent 6495 Triplequad mass spectrometer (Agilent Technologies, Santa Clara, USA). For lipid quantification, deuterated internal standards are added prior to sample extraction. Samples are extracted by solid phase extraction (SPE). Clean extracts are loaded on the LC system for LC/APCI-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
Whole blood, plasma, serum	400 µl	Frozen, on dry ice
Tissue	40 mg	Frozen piece of tissue, on dry ice
Cells	2 × 10 ⁶ cells <i>or</i> 300 μg of total protein	Frozen, on dry ice
Cell supernatant, media, liquids, etc.	0.5–20 ml	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
 Disorders (Huntington's disease, Parkinson's disease)
- > Atherosclerosis
- > Autoimmune disorders
- > Aging
- Cancer
 - > Food quality

Coverage

ANALYTE	CATEGORY
24(S)-Hydroxycholesterol	Sterol
27-Hydroxycholesterol	
On demand:	
25-hydroxycholesterol	
4β-hydroxycholesterol	
5-Hydroxycholesterol	
7α-hydroxycholesterol	
7β-hydroxycholesterol	
24,25-dihydrolanosterol	
5 β,6β-dihydroxycholestanol	
7-dihydrocholesterol	
7α,25-dihydroxycholesterol	
5α,6α-Epoxycholesterol	
5β,6β-Epoxycholesterol	
7-ketocholesterol	
Cholestan-3β, 5α, 6β-triol	
6-oxo-cholestan-3β, 5α-diol	
7α-Hydroxy-4-cholesten-3-one	



