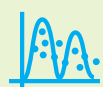


## Cholesterol Pathway



### Deliverables

This pre-validated panel includes cholesterol and 8 intermediates of its synthesis pathway and offers **fully quantitative results** (expressed in pmol). For more flexibility, the analytes are grouped into three assays that can be ordered independently of each other. In addition, the amount of each sample used is provided (weight or volume).



### Method

Cholesterol intermediates are analysed by **LC/APCI-MS/MS** and **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. Extracts are loaded on the LC system for LC/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
<b>Whole blood, plasma, serum</b>	500 µl	<i>Frozen, on dry ice</i>
<b>Tissue</b>	100 mg	<i>Frozen piece of tissue, on dry ice</i>
<b>Cells</b>	3 × 10 <sup>6</sup> cells <i>or</i> 500 µg of total protein	<i>Frozen, on dry ice</i>
<b>Cell supernatant, media, liquids, etc.</b>	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

- > Cholesterol biosynthesis and enzymatic control
- > Cardiovascular disease
- > Cancer Therapy
- > Embryogenesis

## Coverage

ASSAY	ANALYTE*	CATEGORY
1.	<b>Mevalonate</b>	<i>FA</i>
2.	<b>Geranyl-PP</b>	<i>Isoprenoid</i>
	<b>Farnesyl-PP</b>	<i>Isoprenoid</i>
3.	<b>Squalene</b>	<i>Isoprenoid</i>
	<b>2,3-Epoxy-squalene</b>	<i>Isoprenoid</i>
	<b>Lanosterol</b>	<i>Sterol</i>
	<b>Desmosterol</b>	<i>Sterol</i>
	<b>Lathosterol</b>	<i>Sterol</i>
	<b>Cholesterol</b>	<i>Sterol</i>

\* expandable on request

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