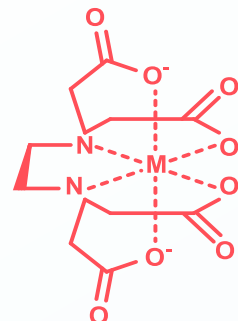




# Metal Cofactors and Toxic Metals



## Metal Ions Panel

Metabolon's ICP-MS-based Metal Ions Panel provides precise measurements of biologically important metal ions in biological samples. In addition to the well-established problems of toxicity associated with several metals, the vital role these ions play in a variety of biological pathways whether by catalyzing enzymatic reactions or stabilizing protein structures is still becoming clear. Intimately intertwined with the proteome and metabolome, metal ions represent an intrinsic piece vital to the holistic understanding of biological phenomena ranging from development through normal functioning to disease. Without an understanding of the role of these metals, a complete understanding of biological processes is not possible. Metabolon's Metal Ions Panel measures a variety of metals ions ranging from the macro level (ppm) including Na, K and Ca to the micro level (ppb) including Mo, Cu and Ni.

## Applications

- ▶ Nutritional research
- ▶ Environmental exposure
- ▶ Bioprocessing
- ▶ Health and wellness

**Contact us to get started**  
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Metal Ions Panel	LLOQ
	Plasma/Serum/Urine
Na	160000 ug/mL (ppb)
Mg	1000 ug/mL (ppb)
K	8000 ug/mL (ppb)
Ca	4000 ug/mL (ppb)
Fe	40.0 ug/mL (ppb)
Cu	40.0 ug/mL (ppb)
Zn	40.0 ug/mL (ppb)
Al	15.7 ug/mL (ppb)
Cr	6.25 ug/mL (ppb)
Sr	5.00 ug/mL (ppb)
Se	4.00 ug/mL (ppb)
Ni	2.00 ug/mL (ppb)
Ba	2.00 ug/mL (ppb)
As	1.25 ug/mL (ppb)
V	1.25 ug/mL (ppb)
Tl	0.500 ug/mL (ppb)
Pb	0.400 ug/mL (ppb)
Mn	0.400 ug/mL (ppb)
Cd	0.250 ug/mL (ppb)
Sb	0.250 ug/mL (ppb)
Co	0.250 ug/mL (ppb)
Ag	0.250 ug/mL (ppb)
Mo	0.250 ug/mL (ppb)

The panel is for non-GxP testing and is not for diagnostic use

## Analysis Method and Instrumentation

ICP-MS (Thermo ICAP-RQ)

## Sample Type and Required Amounts

Sample Type	Sample Requirement
Plasma/Serum	125 µL
Urine	125 µL
Cells	100 µL pellet
Culture Supernatant	125 µL
Others on request	