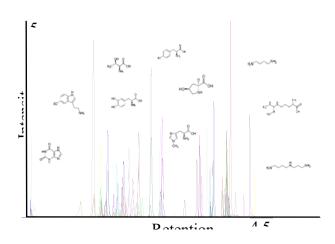
Assay Sheet: Biocrates MxP® Quant 500

Description:

The MxP® Quant 500 kit from biocrates life sciences ag (Innsbruck, Austria) is applied for the measurement of more than 600 metabolites in 10 µl liquid sample (e.g. plasma and serum). The kit allows the determination of selected metabolites belonging to 27 different metabolite classes. Detection and quantification is carried out by using triple quad mass spectrometry (MS/MS). One part of the



metabolites (from alkaloids to vitamins and cofactors) is separated by ultra high performance chromatography (UHPLC) before entering the MS (LC-MS/MS). The other part of the metabolites (from acylcarnitines to triglycerides) is directly infused into the mass spectrometer and thus analyzed via flow injection analysis (FIA). The principal workflow includes a chemical derivatization step and the extraction of the analytes as sample preparation followed by LC-MS/MS or FIA determination. Raw data are processed applying the MetIDQ software from biocrates life sciences ag. Concentration data of the metabolites are provided as µmol/l or pmol/mg.

Validated matrices:

- Human serum and plasma (min. 30 μl)
- Rodent plasma (min. 15 μl)

Beside the validated matrices also additional matrices can be analyzed on request.

Selected References

Metabolite Class Overview:

Metabolite Class	Acronym	Number of Metabolites
free carnitine		1
acylcarnitines		39
amino acids		20
biogenic amines		9
amino acid related		30
hexose (sum of hexoses)		1
lysophosphatidylcholines (lysoPC)		14
phosphatidylcholines (PC)		76
sphingolipids (SM)		15
alkaloid		1
aminoxide		1
bile acids		14
carboxylic acids		7
cresol		1
fatty acids		3
hormones and related		4
Indoles and derivatives		4
nucleobases and related		2
vitamin/cofactor		1
ceramides		28
Dihydroceramides		8
hexosylceramides		19
dihexosylceramides		9
trihexosylceramides		6
cholesteryl esters		22
diglycerides		44
triglycerides		242