

Impact of skin tissue collection method on downstream MALDI imaging

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Supplementary Table S1

FFPE vs Fresh Frozen +ve ion mode
Purine metabolism
Pyrimidine metabolism
N-Glycan biosynthesis
Glycosphingolipid biosynthesis - globo and isoglobo series
Glycosphingolipid biosynthesis - lacto and neolacto series
Fructose and mannose metabolism
Fatty acid biosynthesis
Fatty acid elongation
Amino sugar and nucleotide sugar metabolism
Metabolism of xenobiotics by cytochrome P450
Drug metabolism - other enzymes

Supplementary Table S2

Fresh Frozen vs FFPE +ve ion mode
Glycosaminoglycan degradation
Glycosphingolipid biosynthesis - lacto and neolacto series
N-Glycan biosynthesis
Steroid biosynthesis
Primary bile acid biosynthesis
Mucin type O-glycan biosynthesis
Mannose type O-glycan biosynthesis
Glycosphingolipid biosynthesis - globo and isoglobo series
Biosynthesis of unsaturated fatty acids

Supplementary Table S3

Common metabolites +ve ion mode
Steroid hormone biosynthesis
Purine metabolism
Pyrimidine metabolism
Amino sugar and nucleotide sugar metabolism
Glycosylphosphatidylinositol (GPI)-anchor biosynthesis
Glycerophospholipid metabolism
One carbon pool by folate
Riboflavin metabolism
Nicotinate and nicotinamide metabolism

Porphyrin and chlorophyll metabolism

Supplementary Table S4

FFPE vs Fresh Frozen -ve ion mode
Glycosphingolipid biosynthesis - lacto and neolacto series
N-Glycan biosynthesis
Primary bile acid biosynthesis
Various types of N-glycan biosynthesis
Inositol phosphate metabolism
Glycosphingolipid biosynthesis - globo and isoglobo series
Folate biosynthesis
Porphyrin and chlorophyll metabolism
Biosynthesis of unsaturated fatty acids
Phosphatidylinositol signaling system

Supplementary Table S5

Fresh Frozen vs FFPE -ve ion mode
Purine metabolism
Folate biosynthesis
Riboflavin metabolism
Pyrimidine metabolism
Mannose type O-glycan biosynthesis
Drug metabolism - other enzymes
Citrate cycle (TCA cycle)
Pentose phosphate pathway
Pentose and glucuronate interconversions
Fructose and mannose metabolism
Alanine, aspartate and glutamate metabolism
Phosphonate and phosphinate metabolism
Amino sugar and nucleotide sugar metabolism
Glycerophospholipid metabolism
Pyruvate metabolism
One carbon pool by folate
Pantothenate and CoA biosynthesis
Porphyrin and chlorophyll metabolism
Terpenoid backbone biosynthesis
Metabolism of xenobiotics by cytochrome P450
Drug metabolism - cytochrome P450

Supplementary Table S6

Common metabolites -ve ion mode
Fatty acid degradation
Butanoate metabolism
Terpenoid backbone biosynthesis
Citrate cycle (TCA cycle)
Pantothenate and CoA biosynthesis
Pyrimidine metabolism
Amino sugar and nucleotide sugar metabolism
Metabolism of xenobiotics by cytochrome P450
Glycerophospholipid metabolism
Propanoate metabolism
Valine, leucine and isoleucine degradation
Drug metabolism - other enzymes
Purine metabolism
Pentose and glucuronate interconversions
Galactose metabolism
Ascorbate and aldarate metabolism
Synthesis and degradation of ketone bodies
Alanine, aspartate and glutamate metabolism
Cysteine and methionine metabolism
Valine, leucine and isoleucine biosynthesis
Lysine degradation
Tryptophan metabolism
Phosphonate and phosphinate metabolism
Starch and sucrose metabolism
Glycerolipid metabolism
Pyruvate metabolism
Glyoxylate and dicarboxylate metabolism
Drug metabolism - cytochrome P450