

DIAGNOSABLE DISORDERS BY GC/MS

DISORDERS
Methylmalonic Acidemia
Propionic Acidemia
3-Ketothiolase Deficiency
Isovaleric Acidemia
3-Methylcrotonyl-CoA Carboxylase Deficiency
Multiple Carboxylase Deficiency
3-OH-3-Methylglutaric Aciduria
3-Methylglutaconic Aciduria
Glutaric Aciduria Type I
Glutaric Aciduria Type II
3-OH-Isobutyric Aciduria
5-Oxoprolinuria
2-Hydroxyglutaric Acidemia
4-Hydroxybutyric Aciduria
Mevalonic Aciduria
Glyceroluria
Primary Hyperoxaluria Type I
L-Glyceric Acidemia (Primary Hyperoxaluria Type II)
2-Ketoadipic Aciduria
Alcaptunuria
Urea Cycle Disorder / OTC Deficiency
Phenylketonuria
Maple Syrup Urine Disease
Tyrosinemia Type I
MCAD Deficiency
Canavan Disease
Lactic Aciduria (Condition)
Respiratory chain disease
Ketosis (Condition)

DISORDERS
Dicarboxylic Aciduria
Ketotic dicarboxylic aciduria
Non-ketotic dicarboxylic aciduria
3-Hydroxydicarboxylic Aciduria (Condition)
Zellweger Syndrome
Metabolic disorders of purine and pyrimidine
Valproic acid treatment
Ethosuccimide treatment
Glycerol treatment
Carbocysteine administration
Aspirin administration
Sodium benzoate administration
MCT milk feeding
Food containing vanilla taking
Special formula containing vanilla feeding
Ascorbic acid infusion
Neonatal transient hypertyrosinemia
Severe liver dysfunction
Hypoxia
Acetonemic vomiting
Neuroblastoma

DETECTABLE COMPONENTS BY GC/M

Compound Name
Boroic acid-3TMS
Trichloroacetic acid-TMS
Phenol-TMS
Lactic acid-2TMS
2-Hydroxyisobutyric acid-2TMS
Caproic acid-TMS
Glycolic acid-2TMS
L-Alanine-2TMS
L-Glycine-2TMS
Glyoxylic acid-oxime-2TMS
Oxalic acid-2TMS
2-Hydroxybutyric acid-2TMS
2-Furoic acid-TMS
Sarcosine-2TMS
3-Hydroxypropionic acid-2TMS
Pyruvic acid-oxime-2TMS
Valproic acid-TMS
4-Cresol-TMS
3-Hydroxybutyric acid-2TMS
3-Hydroxyisobutyric acid-2TMS
2-Hydroxyisovaleric acid-2TMS
alpha-Aminobutyric acid-2TMS
2-Methyl-3-hydroxybutyric acid-2TMS
Malonic acid-2TMS
beta-Aminoisobutyric acid-2TMS
3-Hydroxyisovaleric acid-2TMS
2-Keto-isovaleric acid-oxime-2TMS
Methylmalonic acid-2TMS

Compound Name
L-Valine-2TMS
Ethylhydracrylic acid-2TMS
Urea-2TMS
4-Hydroxybutyric acid-2TMS
2-Hydroxyisocaproic acid-2TMS
3-Hydroxyvaleric acid-2TMS
D,L-Norvaline-2TMS
Acetoacetic acid-2TMS
2-Hydroxy-3-Methylvaleric acid-2TMS
Benzoic acid-TMS
Acetoacetic acid-oxime-2TMS
Octanoic acid-TMS
Cyclohexanediol-2TMS
2-Methyl-3-hydroxyvaleric acid-2TMS
2-Propylhydroxyglutaric acid-oxime-2TMS
L-Leucine-2TMS
Glycerol-3TMS
Acetylglycine-TMS
Phosphoric acid-3TMS
Ethylmalonic acid-2TMS
2-Ketoisocaproic acid-oxime-2TMS
L-Isolucine-2TMS
allo-Isoleucine-2TMS
Phenylacetic acid-TMS
Maleic acid-2TMS
L-Proline-2TMS
2-Octenoic acid-TMS
Succinic acid-2TMS
Methylsuccinic acid-TMS
Glyceric acid-3TMS
Fumaric acid-2TMS
Uracil-2TMS
Citraconic acid-2TMS
Propionylglycine-TMS

Compound Name
L-Serine-3TMS
Acetylglycine-2TMS
Mevalonic lactone-TMS
Isobutyrylglycine-TMS
2-propyl-3-hydroxy-pentanoic acid-2TMS
L-Threonine-3TMS
Mesaconic acid-2TMS
Glutaric acid-2TMS
Thymine-2TMS
3-Methylglutaconic acid-2TMS
3-Methylglutaric acid-2TMS
Propionylglycine-2TMS
Isobutyrylglycine-2TMS
2-Deoxytetronic acid-3TMS
3-Methylglutaconic acid(E)-2TMS
Glutaconic acid-2TMS
Succinylacetone-oxime-3TMS
Decanoic acid-TMS
3-Methylglutaconic acid(Z)-2TMS
2-Propyl-5-hydroxy-pentanoic acid-2TMS
Citramalic acid-3TMS
Mandelic acid-2TMS
Isovalerylglycine-TMS
Malic acid-3TMS
Adipic acid-2TMS
Phenyllactic acid-2TMS
p-Nitrophenol-TMS
Isovalerylglycine-2TMS
2-Hexenedioic acid-2TMS
Aspartic acid-3TMS
L-Methionine-2TMS
5-Oxoproline-2TMS
Thiodiglycolic acid-2TMS
4-Hydroxyproline-3TMS

Compound Name
3-Methyladipic acid-2TMS
Acetylsalicylic acid-TMS
7-Hydroxooctanoic acid-2TMS
2-Propyl-glutaric acid-2TMS
Cinnamic acid-TMS
5-Hydroxy-2-furoic acid-2TMS
Tiglylglycine-2TMS
3-Methylcrotonoylglycine-TMS
Tiglylglycine-TMS
3-Hydroxybenzoic acid-2TMS
3-Methylcrotonoylglycine-2TMS
2-Hydroxyphenylacetic acid-2TMS
2-Hydroxyglutaric acid-3TMS
Pimelic acid-2TMS
3-Hydroxy-3-methylglutaric acid-3TMS
3-Hydroxyphenylacetic acid-2TMS
L-Glutamic acid-3TMS
4-Hydroxybenzoic acid-2TMS
2-Ketoglutaric acid-oxime-3TMS
L-Phenylalanine-2TMS
4-Hydroxyphenylacetic acid-2TMS
Lauric acid-TMS
Tartaric acid-4TMS
Hexanoylglycine-2TMS
2-Ketoglutaric acid-oxime-3TMS
N-Acetylaspartic acid-2TMS
Glutaconic acid-3TMS
N-Acetylaspartic acid-3TMS
Asparagine, TMS
2-Hydroxyadipic acid-3TMS
Octenedioic acid-2TMS
3-Hydroxyadipic acid-3TMS
Suberic acid-2TMS
Lysine, TMS

Compound Name
2-Keto-adipic-OX-3
alpha-Amino adipic acid
Tricarballic acid-3TMS
Glutaconic acid-3TMS
Aconitic acid-3TMS
Orotic acid-3TMS
3-Methoxy-4-hydroxybenzoic acid-2TMS
Homovanillic acid-2TMS
L-Glutamine-3TMS
Azelaic acid-2TMS
Hippuric acid-2TMS
Isocitric acid-4TMS
Citric acid-4TMS
Glucuronic lactone-3TMS
Hippuric acid-TMS
Homogentisic acid-3TMS
Myristic acid-TMS
Glucuronic lactone-3TMS
Methylcitric acid-4TMS
3-(3-Hydroxyphenyl)-3-hydroxypropionic acid-3TMS
Caffeine
Hydroxylysine (2 isomers)
Methylcitric acid-4TMS
Vanilmandelic acid-3TMS
Sebacic acid-2TMS
Decadienedioic acid-2TMS
4-Hydroxyphenyllactic acid-3TMS
Theophylline-TMS
L-Histidine-3TMS
3,4-Dihydroxy mandelic acid-4TMS
L-Tyrosine-3TMS
Indol-3-acetic acid-2TMS
Palmitoleic acid-TMS
Palmitic acid TMS

Compound Name
2-Hydroxysebacic acid -3TMS
3-Hydroxysebacic acid -3TMS
2-Hydroxyhippuric acid-2TMS
Dodecanedioic acid-2TMS
Naproxen-TMS
N-Acetyltyrosine-3TMS
Uric acid-4TMS
Margaric acid-TMS
3,6-Epoxydodecanedioic acid-2TMS
Indolelactic acid-3TMS
Stearic acid-TMS
L-Tryptophan-3TMS
3-hydroxydodecanedioic acid-3TMS
Chloramphenicol-2TMS