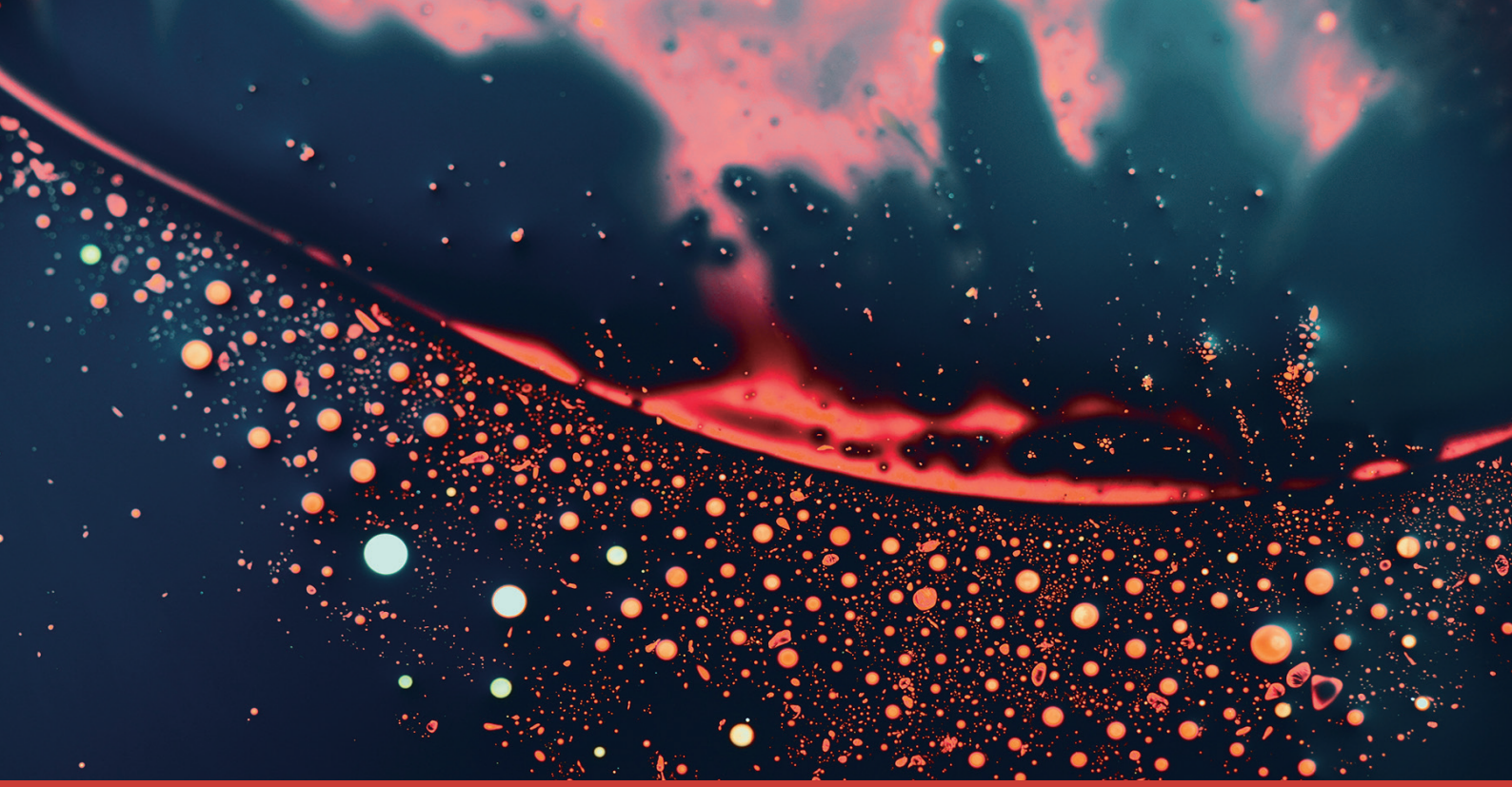


MASS SPECTROMETRY REAGENTS

上海睿康生物
Shanghai Reigncom Biotech

CE

Catalogue

Note: Reagents are supplied as standard 96-test kits. Other formats are available upon request; please inquire with your local sales team.

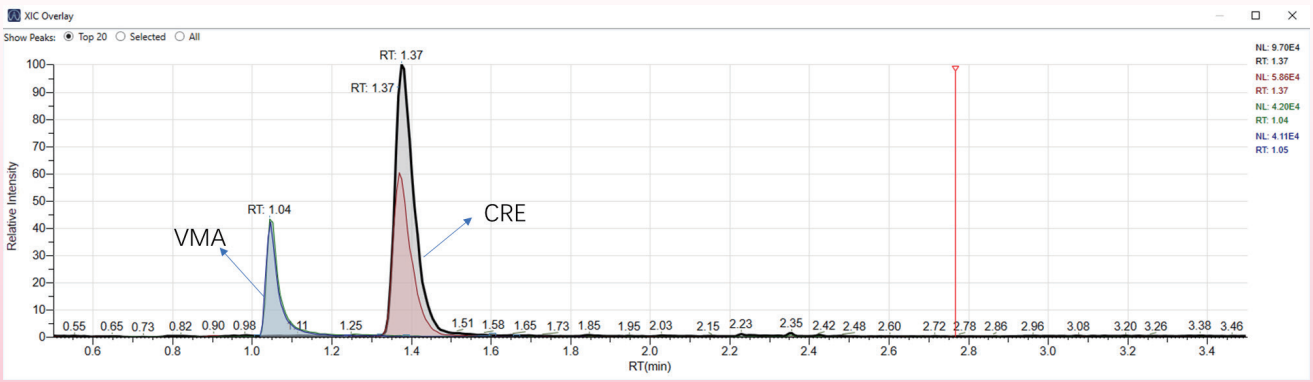
Vanillylmandelic Acid & Creatinine Assay Kit

Vanillylmandelic acid (VMA) is the final metabolite of epinephrine and norepinephrine, and is closely related to neuroblastoma, pheochromocytoma and other diseases. Detection of the VMA level can be used to screen neuroblastoma in children and monitor the course of treatment. The concentration of creatinine not only measures the filtration efficiency of glomeruli, but can also be used to normalize other analytes in random urine samples. When measuring random urine samples, divide the VMA amount by the creatinine amount to obtain the relative armount of VMA to creatinine.

◆ **Only dilution required before analyzing**

Parameters

- **Sample Type:** 24-hour urine or random urine
- **Sample preparation method:** Dilution
- **Injection Volume:** 5μL
- **UHPLC Colomn:**M-VMA
- **Column Temperature:** 40°C
- **Ion Source:** ESI
- **Analysis Time:** 4 minutes/sample
- **Limit of Quantitation:** 0.18 pg/mL (VMA), 9.0 pg/mL (Creatinine)
- **Linearity:** 0.2-100 pg/mL (VMA), 10-5000 pg/mL (Creatinine)
- **Recovery Rate:**100-103%
- **Intra-assay CV:** <5%
- **Inter-assay CV:** <5%



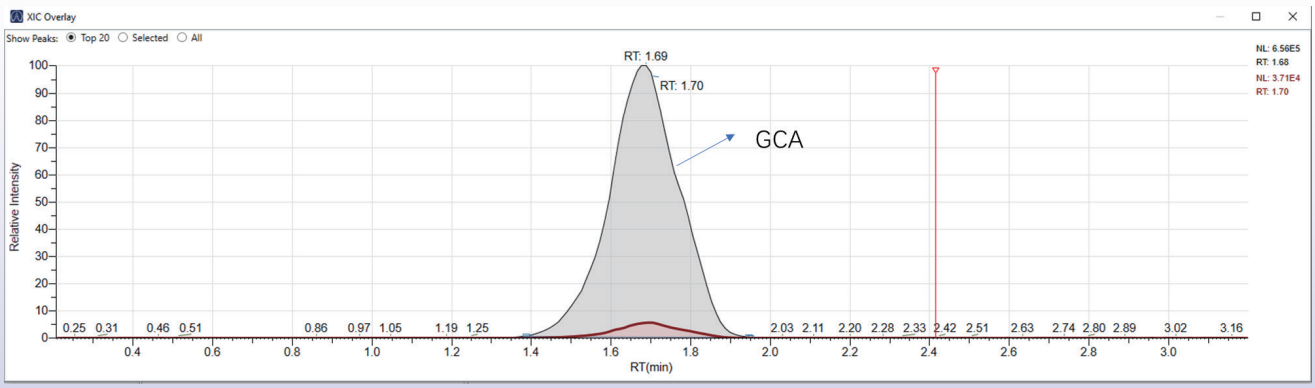
Glycocholic Acid Assay Kit

Glycocholic acid is a type of bile acids in human body, and is an essential substance for fat metabolismin human body. The main factor for abnormal bile acids level in serum is enterohepatic circulation disorder of bile acids caused by hepatobiliary diseases, and changes of bile acids level in serum then affects the synthesis and secretion of bile acids by the liver. Therefore, serum bile acids are important markers to measure liver and gallbladder functions.

◆Only protein precipitation required before analyzing

Parameters

- **Sample Type:** Serum
- **Sample preparation method:** Protein Precipitation
- **Injection Volume:** 10pL
- **UHPLC Colomn:** N-CG
- **Column Temperature:** 40°C
- **Ion Source:** ESI
- **AnalysisTime:** 2 minutes/sample
- **Limit of Quantitation:** 3.6 ng/mL
- **Linearity:** 4-5000 ng/mL
- **Recovery** Rate: 95-97%
- **Intra-assay CV:** <4%
- **Inter-assay CV:** <4%



25-Hydroxyvitamin D Assay Kit

25-Hydroxyvitamin D is a metabolite of vitamin D. Measurement of 25 hydroxyvitamin D is commonly used in the diagnosis and management of disorders of calcium metabolism. Studies have shown that low levels of 25-hydroxyvitaminD are associated with various diseases such as hypocalcemia,hypophosphatemia, secondary hyperparathyroidism,elevated alkaline phosphatase,osteomalacia in adults and rickets in children.

◆ **Traceable to NIST reference material**

Parameters

- **Sample Type:** Serum
- **Sample preparation method:** Liquid-Liquid Extraction
- **Injection Volume:** 10pL
- **UHPLC Colomn:** N-VD
- **Column Temperature:** 40°C
- **Ion Source:** ESI
- **Analysis Time:** 5 minutes/sample
- **AnalysisTime:** 2 minutes/sample
- **Limit of Quantitation:** 3.6 ng/mL
- **Linearity:** 4-5000 ng/mL
- **Recovery** Rate: 95-97%
- **Intra-assay CV:** <4%
- **Inter-assay CV:** <4%

Folate Assay Kit

Folate plays an important role in red blood cell production and the growth of other cells. Folate plays a key role in early pregnancy, reducing the risk of birth defects. Folate deficiency is common in pregnant women, newborns with birth defects, alcoholics, people who avoid fruits and vegetables, and people with impaired small intestine structural functions. Severe folate deficiency can easily lead to megaloblas tic anemia. This product measures the sum of various folate isomers, including levomefolic acid, 5-formyltetrahydrofolate and vitamin B9.

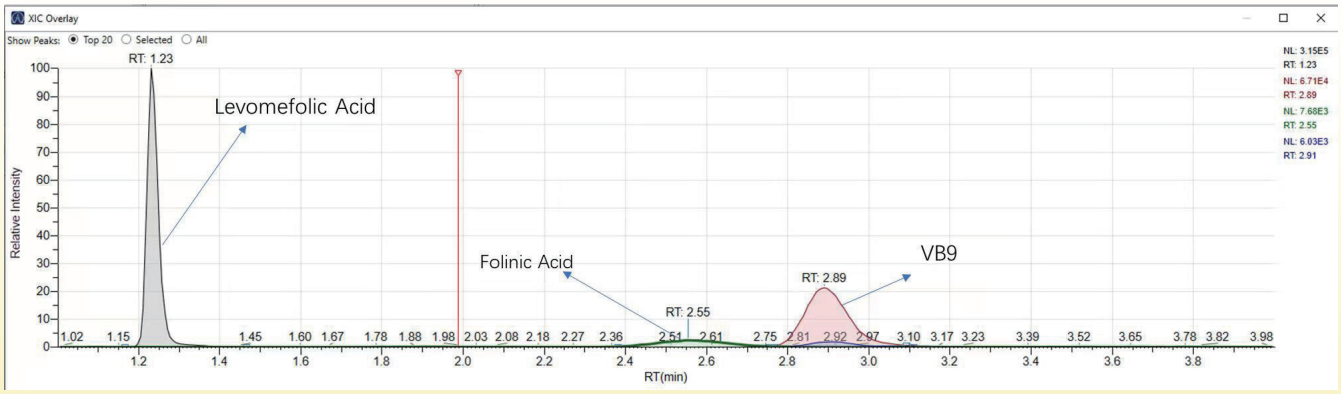
◆ Traceable to NiST reference material

Parameters

- **Sample Type:** Serum
- **Sample preparation method:** Solid-PhaseExtraction
- **Injection Volume:** 10 uL
- **UHPLC Colomn:** N-FA
- **Column Temperature:** 40°C
- **Ion Source:** ESI

AnalysisTime: 5.5minutes/sample

- **Limit of Quantitation:** 0.17 ng/mL (Vitamin B9), 1.5 ng/mL (levomefolic acid), 0.085 ng/mL (5-formyltetrahydrofolate)
- **Linearity:** 0.2-10 ng/mL (Vitamin B9), 1.7-85 ng/mL(levomefolic acid), 0.1-5 ng/mL (5-formyltetrahydrofolate)
- **Accuracy:** RSD<4% (as compared to NIST reference material)
- **Intra-assay CV:** <4%
- **Inter-assay CV:** <6%



Homocysteine Assay Kit

The level of homocysteine has an important relationship with the change of blood lipids level, the development and outcome of various cardiovascular and cerebrovascular diseases and their complications. Hyperhomocysteinemia is an independent risk factor for atherosclerotic vascular disease and recurrent venous thromboembolism. Therefore, timely, accurate and efficient detection of homocysteine levels in blood has important clinical significance.

- **Traceable to NIST reference material with solid accuracy**
- **Only protein precipitation required before analyzing**

Parameters

- **Sample Type:** Serum
- **Sample preparation method:** Solid-PhaseExtraction
- **Injection Volume:** 10 uL
- **UHPLC Colomn:** N-FA
- **Column Temperature:** 40°C
- **Ion Source:** ESI

AnalysisTime: 5.5minutes/sample

- **Limit of Quantitation:** 0.17 ng/mL (Vitamin B9), 1.5 ng/mL (levomefolic acid), 0.085 ng/mL (5-formyltetrahydrofolate)
- **Linearity:** 0.2-10 ng/mL (Vitamin B9), 1.7-85 ng/mL(levomefolic acid), 0.1-5 ng/mL (5-formyltetrahydrofolate)
- **Accuracy:** RSD<4% (as compared to NIST reference material)
- **Intra-assay CV:** <4%
- **Inter-assay CV:** <6%

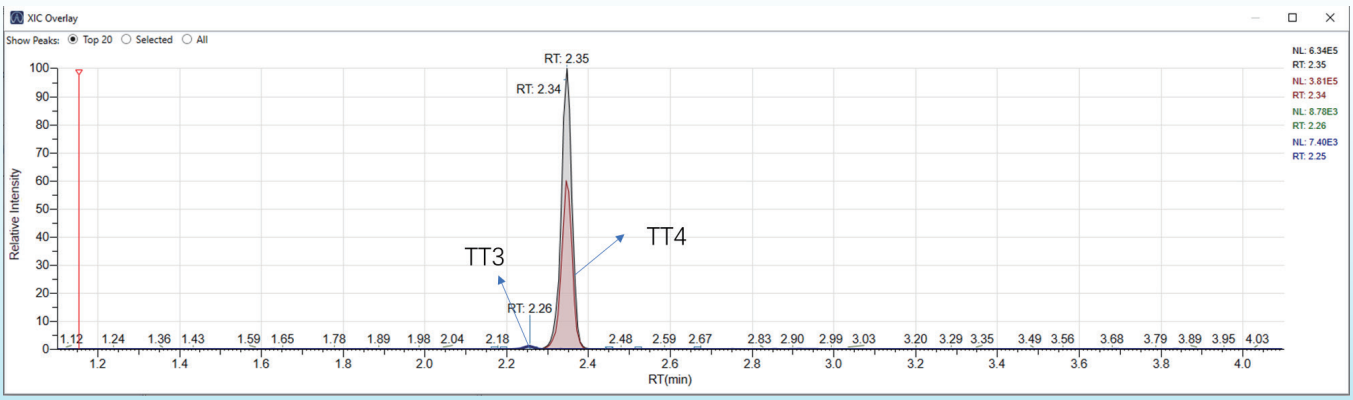
Total T3 & Total T4 Assay Kit

Triodothyronine (T3) and thyroxine (T4) are hormones secreted by the thyroid gland. Total T3 and total T4 are of great significance for the diagnosis and diferen tial diagnosis of hyperthyroidism and hypothyroidism, as well as for the evaluation of the development process,curative effect and prognosis of thyroid function disorders.

- **Traceable to Chinese national standard reference material**
- **Only protein precipitation required before analyzing**

Parameters

- **Sample Type:** Serum
- **Sample preparation method:** Protein Precipitation method
- **Injection Volume:** 20 μL
- **UHPLC Colomn:**E-T3T4
- **Column Temperature:** 40°C
- **Ion Source:** ESI
- **Analysis Time:** 5.2 minutes/sample
- **Limit of Quantitation:** 0.27 ng/mL (T3), 14 ng/mL (T4)
- **Linearity:** 0.3-10 ng/mL (T3), 15-500 ng/mL (T4)
- **Recovery Rate:** 97-103%
- **Intra-assay CV:** <4%
- **Inter-assay CV:** <4%



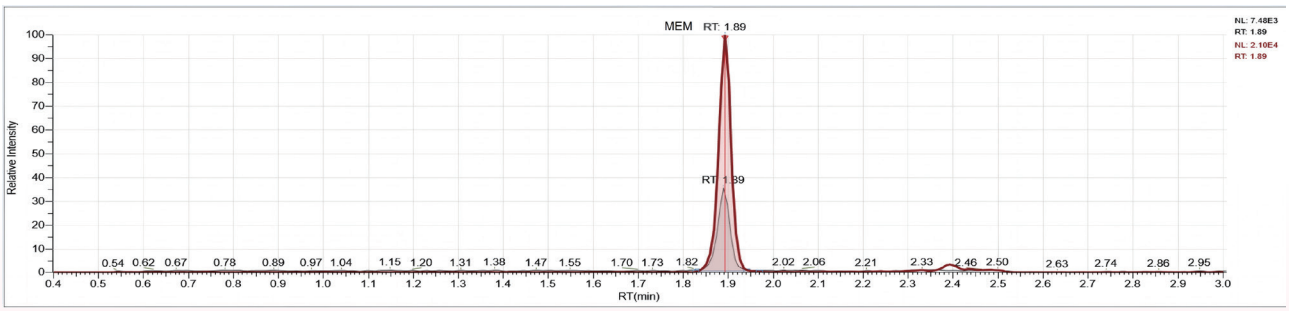
Meropenem Assay Kit

Meropenemisalactamantibioticthathascertainantibacterialactivityagainstavarietyofpathogenicbacteriaandcanbeused for treatment of infectious diseases caused by a variety of pathogenic bacteria, such as pneumonia,urinary tract infections, gynecological infections,skinandsoft tissueinfections,andcouldalsobeusedfor meningitisand sepsistreatment.Themoni toring of meropenemconcentration in the blood,on one hand,can ensure that meropenem is within the appropriate inhibitory concentration range to reduce the occurrence of drug resistance; on the other hand, it can reduce the toxic and side effects caused by inappropriate use of meropenem.

◆ High specificity:
Able to avoid the interference from other antibiotics

Parameters

- **Sample Type:** Serum or plasma
- **Sample preparation method:** Protein Precipitation method
- **Injection Volume:** 1-20 μL (subject to instrument sensitivity)
- **UHPLC Colomn:** TDM-M
- **Column Temperature:** 45°C
- **Ion Source:** ESI
- **Analysis Time:** 3 minutes/sample
- **Limit of Quantitation:** 0.2 pg/mL
- **Linearity:** 0.2-100 μg/mL
- **Recovery Rate:** 85-105%
- **Intra-assay CV:** <4%
- **Inter-assay CV:** <6%



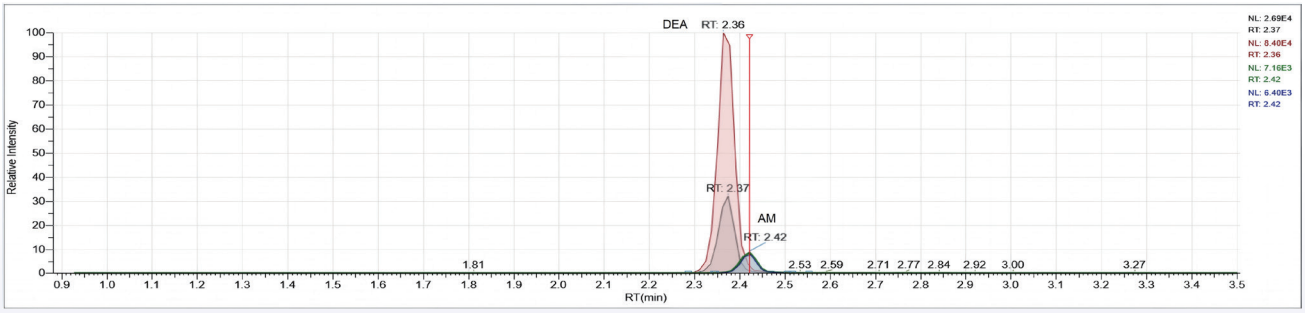
Amiodarone & Desethylamiodarone Assay Kit

Amiodarone is an antiarrhythmic drug used to prevent or treat varies types of cardiac arrhythmias,including ventricular tachycardia,ventricularfibrillation,wideQRScomplextachycardia,atrialfibilation,andparoxysmalsupraventriculartachycardia(PSVT). Desethylamiodarone (DEA) is the major active metabolite of amiodarone produced by hepatic metabolism, and it has a half-life equal to or longer than amiodarone. DEA accumulates extensively in the body and may cause serious adverse effects in different organs. In order to prevent the ocurrence of adverse reactions of amiodarone,it is particularly important to monitor amiodarone and its active metabolites.

◆ Simultaneous detection of drugs and metabolites provides a more conducive guide for personalized medicine

Parameters

- **Sample Type:** Serum or plasma
- **Sample preparation method:** Protein Precipitation method
- **Injection Volume:** 1-20 μL (subject to instrument sensitivity)
- **UHPLC Colomn:** TDM-M
- **Column Temperature:** 45°C
- **Ion Source:** ESI
- **Analysis Time:** 3 minutes/sample
- **Limit of Quantitation:** 0.1 pg/mL
- **Linearity:** 0.1-40 μg/mL
- **Recovery Rate:** 85-105%
- **Intra-assay CV:** <6%
- **Inter-assay CV:** <6%



Immunosuppressants Assay Kit

Amiodarone is an antiarrhythmic drug used to prevent or treat varies types of cardiac arrhythmias,including ventricular tachycardia,ventricularfibrillation,wideQRScomplextachycardia,atrialfibilation,andparoxysmalsupraventriculartachycardia(PSVT). Desethylamiodarone (DEA) is the major active metabolite of amiodarone produced by hepatic metabolism, and it has a half-life equal to or longer than amiodarone. DEA accumulates extensively in the body and may cause serious adverse effects in different organs. In order to prevent the ocurrence of adverse reactions of amiodarone,it is particularly important to monitor amiodarone and its active metabolites.

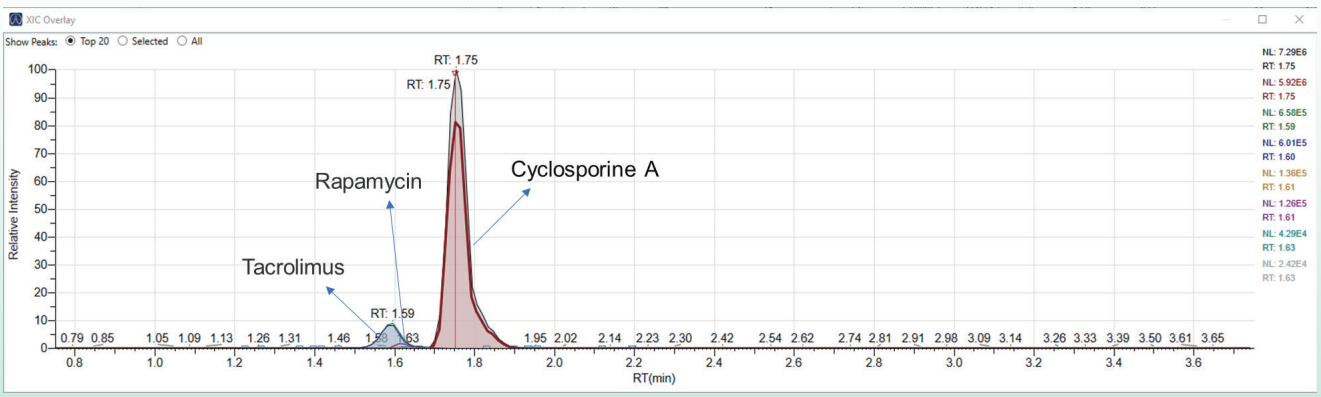
◆ Accurate quantification of 4 suppressants simultaneously

Analytes

Cyclosporine A
Sirolimus
Tacrolimus

Parameters

- **Sample Type:** Whole blood
- **Sample preparation method:** Protein Precipitation method
- **Injection Volume:** 10-30 pL (subject to instrument sensitivity)
- **UHPLC Colomn:** TDM-ISD
- **Column Temperature:** 60°C
- **Ion Source:** ESI
- **Analysis Time:** 4 minutes/sample
- **Limit of Quantitation:** 1 ng/mL (Tacrolimus, Sirolimus, Everolimus), 20 ng/mL (Cyclosporine A)
- **Linearity:** 1-100 ng/mL (Tacrolimus, Sirolimus, Everolimus), 20-2000 ng/mL (Cyclosporine A)
- **Recovery Rate:** 85-115%
- **Intra-assay CV:** <10%
- **Inter-assay CV:** <12%



Antipsychotic Assay kit

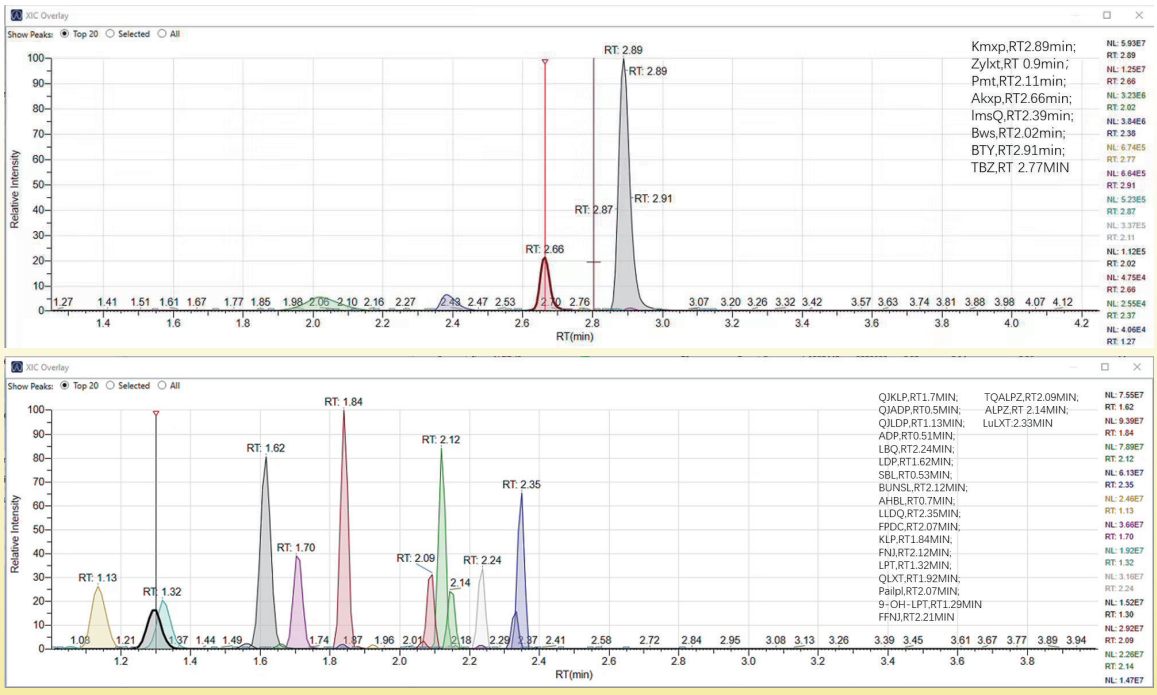
Antipsychotics are a class of psychotropic medications primarily used to manage psychotic symptoms such as agitation, hallucinations, delusions, paranoia, and disordered thoughts, without affecting consciousness. However, treatment with antipsychotics can cause serious adverse effects, including extrapyramidal symptoms, gynecomastia, erectile dysfunction, weight gain, and metabolic syndrome. Therefore, to reduce these adverse effects and improve patients' medication adherence, it is important to monitor antipsychotic drug concentrations in a timely manner.

Analytes

Set A (antipsychotics): Olanzapine, Norolanzapine, Clozapine, Norclozapine, Risperidone, Paliperidone, Aripiprazole, Dehydroaripiprazole, Quetiapine, Norquetiapine, Chlorpromazine, Amisulpride, Ziprasidone, Sulpiride, Perphenazine, Haloperidol, Fluphenazine, Blonanserin, Perospirone, Lurasidone, Thioridazine
Set B (antiepileptics): Valproic acid, Oxcarbazepine, Lamotrigine, Levetiracetam, Carbamazepine, Topiramate, Phenytoin, Primidone, 10-Hydroxycarbazepine
Set C (antidepressants): Citalopram, Escitalopram, Fluvoxamine, Fluoxetine, Norfluoxetine, Paroxetine, Sertraline, Venlafaxine, Desvenlafaxine, Duloxetine, Milnacipran, Agomelatine, Bupropion, Hydroxybupropion, Trazodone, Mirtazapine, Amitriptyline, Imipramine, Doxepin, Desmethylescitalopram, Clomipramine
Set D (anti-dementia): Donepezil, Memantine, Rivastigmine

Parameters

- **Sample Type:** Serum
- **Sample Preparation Method:** Protein Precipitation
- **UHPLC Colomn :** TDM-PSY
- **Injection Volume:** 2-20 uL (subject to instrument sensitivity)
- **Analysis Time:** 5 minutes/sample
- **Column Temperature:** 40°C
- **Ion Source:** ESI
- **Limit of Quantitation:** 4 ng/ml
- **Recovery Rate:** 94-111%
- **Intra-assay CV:** <6%
- **Inter-assay CV:** <8%



Antiviral Drugs Assay Kit

Primary aldosteronism (PA) is a leading cause of endocrine hypertension. Accurate measurement of aldosterone and related hormones is critical for early screening and precise diagnosis. Our LC-MS/MS based PA panel simultaneously quantifies six key steroids with high specificity and sensitivity, enabling calculation of the aldosterone-to-renin activity ratio (ARR). This supports effective screening of high-risk patients and differential diagnosis of endocrine causes of hypertension, helping to refine etiological evaluation, guide targeted treatment, and ultimately improve cardio-renal outcomes.

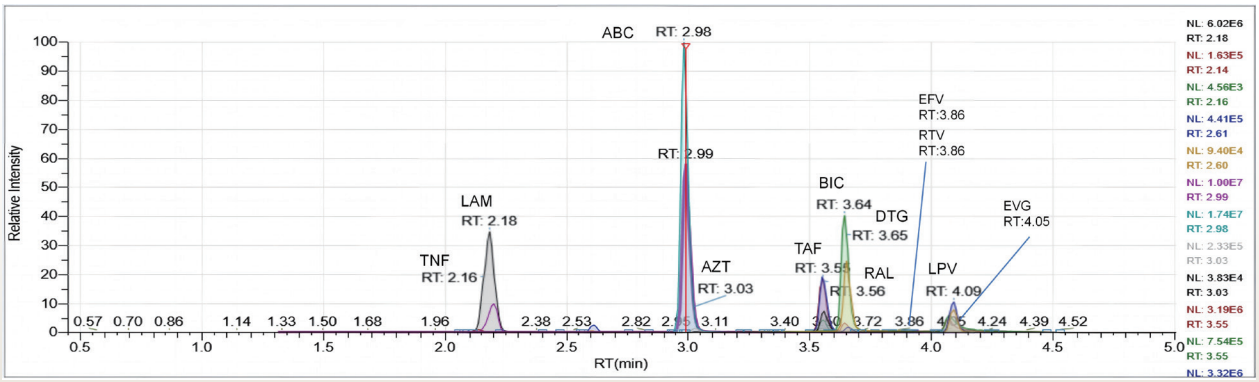
◆ Accurate quantification of 13 antiviral drugs simultaneously

Analytes

Abacavir	Bictegravir	Dolutegravir	Efavirenz
Elvitegravir	Emtricitabine	Lamivudine	Lopinavir
Raltegravir	Ritonavir	Tenofovir alafenamide	Tenofovir disoproxil

Parameters

- **Sample Type:** Plasma
- **Sample preparation method:** Protein Precipitation method
- **Injection Volume:** 2-20 uL (subject to instrument sensitivity)
- **UHPLC Colomn:** TDM-ABV
- **Column Temperature:** 40°C
- **Ion Source:** ESI
- **Analysis Time:** 5 minutes/sample
- **Limit of Quantitation:** 5 ng/mL
- **Recovery Rate:** 85-114%
- **Intra-assay CV:** <8%
- **Inter-assay CV:** <10%



Antibiotics Assay Kit

Antibiotics are antimicrobial substances active against bacteria, and they are the most important type of antibacterial agent for fighting bacterial infections. Antibiotics may either kill or inhibit the growth of bacteria. However, the bacterial problem currently caused by the irrational use of antibiotics is very serious, and drug-resistant infections have become the main cause of death from clinical infectious diseases.To reduce bacterial resistance,it is necessary to ensure that the level of antibiotics in the blood is within the appropriate range of inhibitory concentrations.

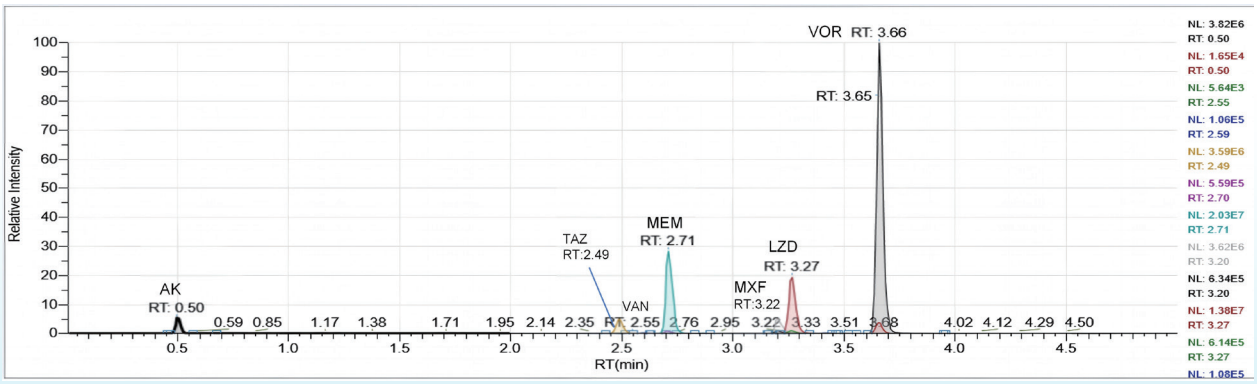
◆ Accurate quantification of 7 antibiotics simultaneously

Analytes

Amikacin	Linezolid	Meropenem
Moxifloxacin	Tazobactam	Vancomycin
Voriconazole		

Parameters

- **Sample Type:** Serum
- **Sample preparation method:** Protein Precipitation method
- **Injection Volume:** 2-20 uL (subject to instrument sensitivity)
- **UHPLC Colomn:** TDM-ABV
- **Column Temperature:** 40°C
- **Ion Source:** ESI
- **Analysis Time:** 5 minutes



Multiple Bild Acids Assay Kit

Bile acids, the major organic component of bile, is a general term for several steroid acids with similar structures. In human bile, bound bile acids are the main forms of existence. Hepatobiliary related disease can cause metabolic alternation in bile acids, leading to significant changes in the levels of different components in the bile. The serum bile acids panel assay can comprehensively and dynamically reflect the changes of hepatobiliary diseases from development and treatments.

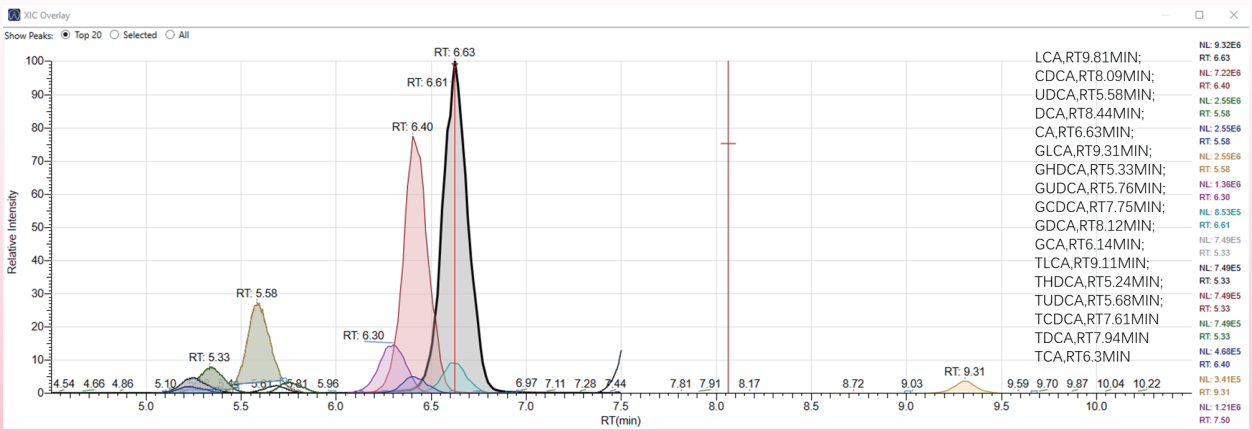
◆ Accurate quantification of 17 bile acids simultaneously

Analytes

Chenodeoxycholic acid	Cholic acid	Deoxycholic acid
Glycochenodeoxycholic acid	Glycocholic acid	Glycodeoxycholic acid
Glycohyodeoxycholic acid	Glycolithocholic acid	Glycoursodeoxycholic acid
Lithocholic acid	Taurochenodeoxycholic acid	Taurocholic acid
Taurodeoxycholic acid	Taurohyodeoxycholic acid	Taurolithocholic acid
Tauroursodeoxycholic acid	Ursodeoxycholic acid	

Parameters

- **Sample Type:** Serum
- **Sample preparation method:** Protein Precipitation method
- **Injection Volume:** 2-10 pL (subject to instrument sensitivity)
- **UHPLC Colomn:** M-BA
- **Column Temperature:** 60°C
- **Ion Source:** ESI
- **Analysis Time:** 15 minutes/sample
- **Recovery Rate:** 90-110%
- **Intra-assay CV:** <8%
- **Inter-assay CV:** <11%



Multiple Amino Acids Assay Kit

Free fatty acid (FFA) is a lipid present in the human body. Most of the FFAs are bound to albumins and exist in the blood. There are mostly three types of FFAs: cholesterol, neutral fat (triglycerides), and phospholipids. The concentration of FFA in serum is related to lipid metabolism, glucose metabolism, and endocrine function, and the concentration of FFA will change due to diseases such as diabetes, severe liver diseases, and hyperthyroidism. Therefore, monitoring the change of FFA levels in the human body has clinical significance.

◆ Accurate quantification of 21 amino acids simultaneously

Analytes

Alanine	Arginine	Asparagine
Aspartic acid	Citrulline	Glutamic acid
Glutamine	Glycine	Histidine
Isoleucine	Leucine	Lysine
Methionine	Ornithine	Phenylalanine
Proline	Serine	Threonine
Tyrosine	Valine	Tryptophan

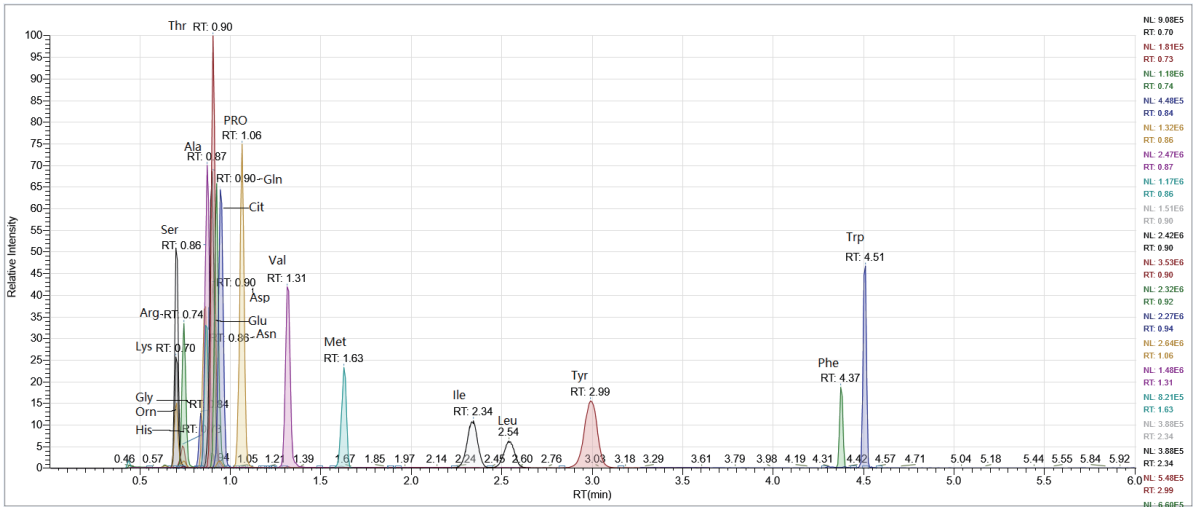
Non-derivatized Sample Preparation

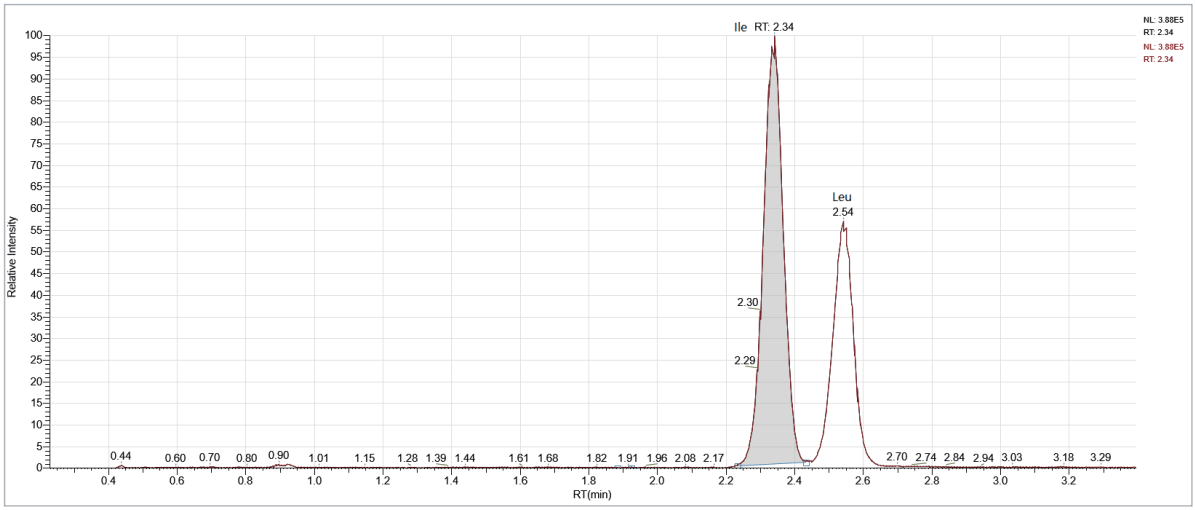
The traditional amino acid detection method (HPLC) needs derivatization treatment before analyzing in order to improve the sensitivity in HPLC and the capability to separate isomers. Reigncom's amino acid reagents (LC-MS/MS) do not require derivatization, only protein precipitation before analyzing is sufficient to get satisfactory results.

- No derivatization step, shorter sample preparation
- Reduced manual steps to improve accuracy
- Suitable for fully automatic sample preparation platform

Parameters

- **Sample Type:** Plasma
- **Sample preparation method:** Protein Precipitation method
- **Injection Volume:** 2 pL
- **UHPLC Colomn:** N-AA
- **Column Temperature:** 30°C
- **Ion Source:** ESI
- **Analysis Time:** 12 minutes/sample
- **Recovery Rate:** 91-107%
- **Intra-assay CV:** <8%
- **Inter-assay CV:** <9%


Thr RT: 0.90
PRO RT: 1.06
Ala RT: 0.87
RT: 0.90 Gln
Cit
Ser RT: 0.86
Val RT: 1.31
RT: 0.90 Asp
Arg RT: 0.74
Glu
Lys RT: 0.70
Asn
Met RT: 1.63
Gly
Orn
His
Ile RT: 2.34
Leu 2.54
Tyr RT: 2.99
Phe RT: 4.37
Trp RT: 4.51
Relative Intensity
RT(min)


Ile RT: 2.34
Leu 2.54
2.30
2.29
Relative Intensity
RT(min)

Fat-soluble Vitamins Assay Kit

Fat-soluble vitamins include vitamins A, D, E, and K. They usually coexist with lipids in natural foods and are absorbed in the intestine in the presence of dietary fat. Because they can readily diffuse through the lipid phase of plasma membranes in the digestive tract and other tissues, their absorption depends on normal lipid digestion and absorption. When fat malabsorption occurs, uptake of fat-soluble vitamins is reduced, leading to corresponding deficiencies. Conversely, long-term excessive intake can cause these vitamins to accumulate in the body and may result in toxicity.

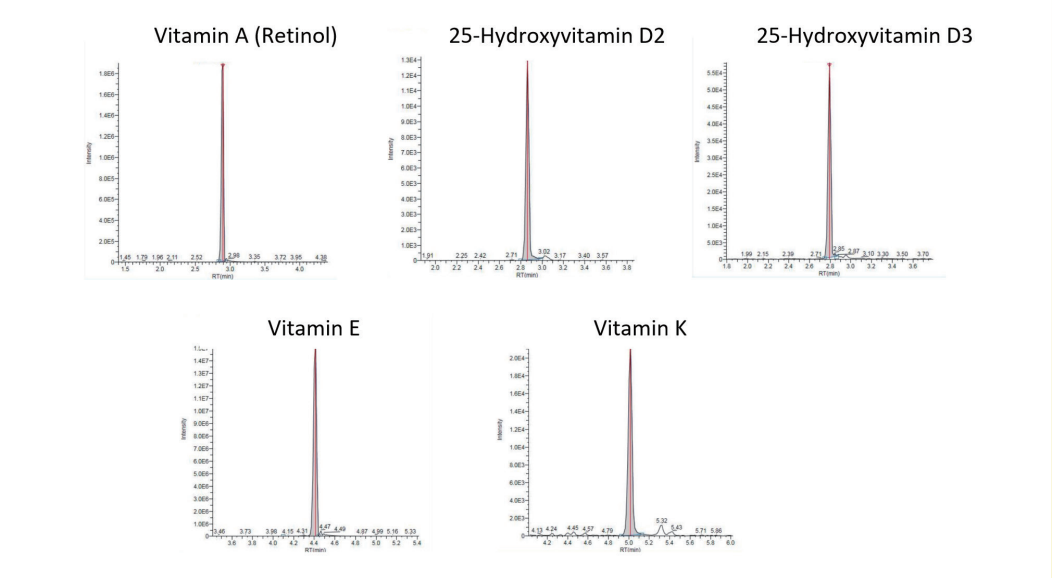
◆ Simultaneous quantification of 5 fat-soluble vitamins accurately

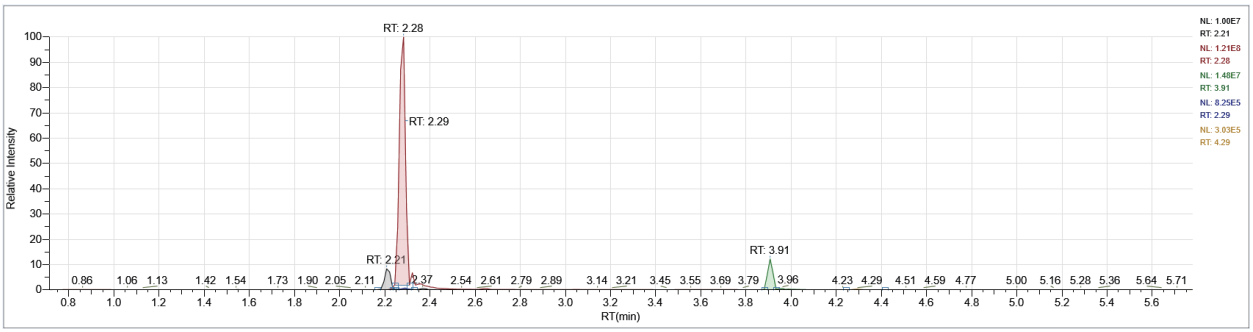
Analytes

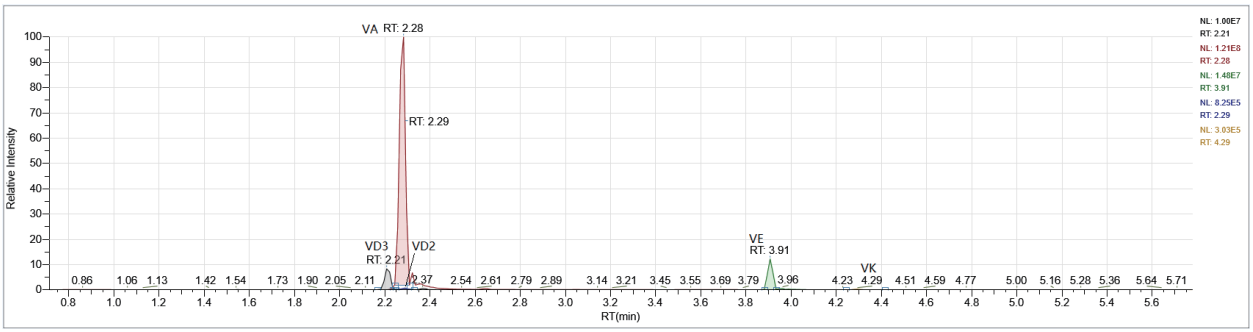
Vitamin A (Retinol)
Vitamin D (25-Hydroxyvitamin D2 & D3)
Vitamin E (a -Tocopherol)
Vitamin K1 (Phylloquinone)

Parameters

- **Sample Type:** Serum
- **Sample Preparation Method:** Solid-Liquid Extraction
- **Injection Volume:** 10-20 uL(subject toinstrument sensitivity)
- **UHPLC Colomn:** N-FSV
- **Column Temperature:** 40°C
- **Ion Source:** APCI
- **Analysis Time:** 6.5 minutes/sample
- **Limit of Quantitation:** 10 ng/mL (Vitamin A), 1 ng/mL (Vitamin D), 20 ng/mL (Vitamin E), 0.1 ng/mL (Vitamin K1)
- **Linearity:** 100-10000 ng/mL (Vitamin A), 2-200 ng/mL (Vitamin D), 500-50000 ng/mL (Vitamin E), 0.1-10 ng/mL (Vitamin K1)
- **Recovery Rate:** 87-110%
- **Intra-assay CV:** <15%
- **Inter-assay CV:** <15%




RT: 2.28
RT: 2.29
RT: 2.21
RT: 3.91
Relative Intensity
RT(min)
NL: 1.00E7
RT: 2.21
NL: 1.21E8
RT: 2.28
NL: 1.48E7
RT: 3.91
NL: 8.25E5
RT: 2.29
NL: 3.03E5
RT: 4.29


VA
RT: 2.28
RT: 2.29
VD3
RT: 2.21
VD2
VE
RT: 3.91
VK
Relative Intensity
RT(min)
NL: 1.00E7
RT: 2.21
NL: 1.21E8
RT: 2.28
NL: 1.48E7
RT: 3.91
NL: 8.25E5
RT: 2.29
NL: 3.03E5
RT: 4.29

Water-soluble Vitamins Assay Kit

Water-soluble vitamins mainly constitute enzyme cofactors in the body and directly affect the activity of certain enzymes. Vitamin B group is a constituent of many coenzymes responsible for the transfer of hydrogen, electrons or groups. They participate in the metabolism of sugar, fat, protein and nucleic acid, etc. that are catalyzed by enzymes. Although water-soluble vitamins overdose would not cause the same accumulation problems as fat-soluble vitamins would, long-term intake of large amounts stil yields side effects. High intake of vitamin B2 can turn the urine yellow, and excessive intake of B6 can cause movement disorders and severe sensory neuropathies.

- **Ultrafiltration technology effectively reduces matrix interference**
- **Accurate quantification of 8 vitamin B indicators simultaneously**

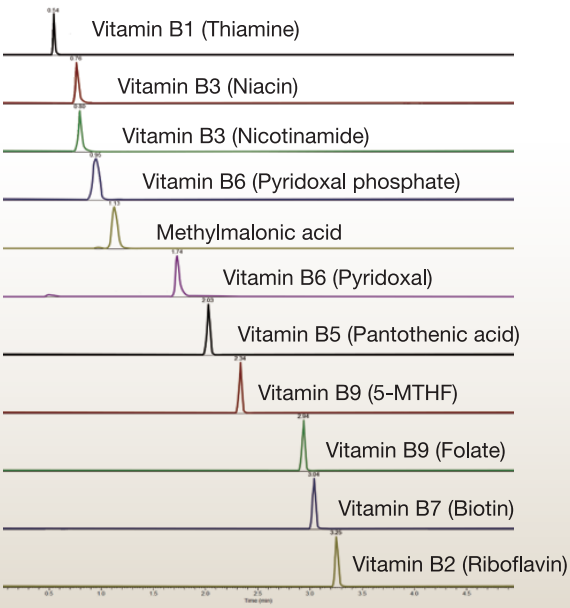
Analytes

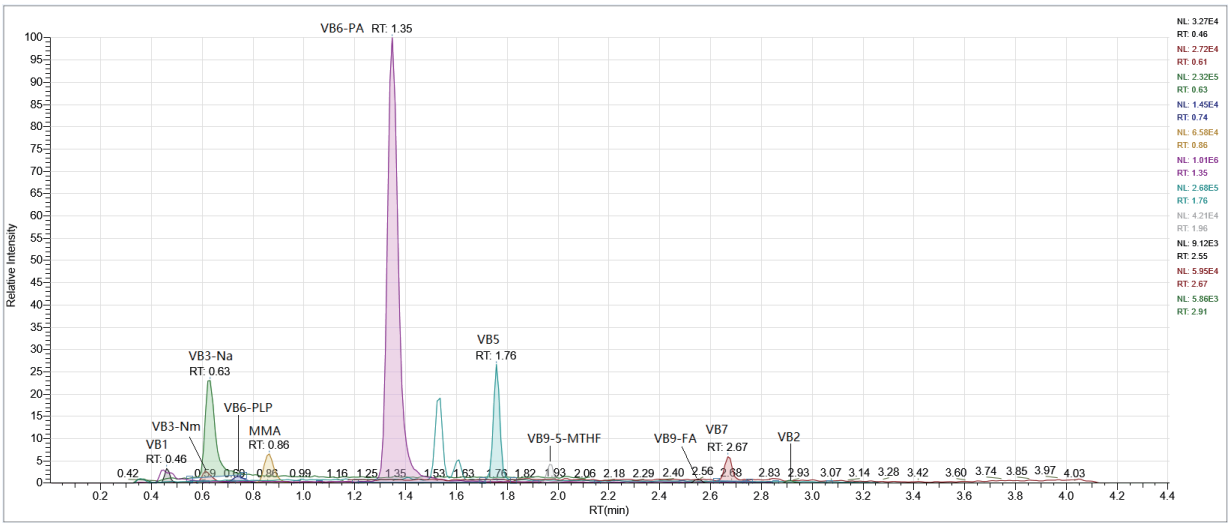
Vitamin B1 (Thiamine)
Vitamin B3 (Niacin & Nicotinamide)
Vitamin B6 (Pyridoxal & Pyridoxal phosphate)
Vitamin B9 (Folate & 5-Methyltetrahydrofolate)
Vitamin B2 (Riboflavin)
Vitamin B5 (Pantothenic acid)
Vitamin B7 (Biotin)
Methylmalonic acid

Parameters

- **Sample Type:** Serum
- **Sample preparation method:** Ultrafiltration method
- **Injection Volume:** 2-20 pL (subject to instrument sensitivity)
- **UHPLC Colomn:** N-WSV
- **Column Temperature:** 40°C
- **Analysis Time:** 5 minutes/sample

- **Recovery Rate:** 91-109%
- **Intra-assay CV:** <8%
- **Inter-assay CV:** <10%

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VB5
RT: 1.76
VB3-Na
RT: 0.63
VB6-PLP
VB3-Nm
MMA
RT: 0.86
VB1
RT: 0.46
VB9-5-MTHF
VB9-FA
VB7
RT: 2.67
VB2
Relative Intensity
RT(min)
NL: 3.27E4
RT: 0.46
NL: 2.72E4
RT: 0.61
NL: 2.32E5
RT: 0.63
NL: 1.45E4
RT: 0.74
NL: 6.58E4
RT: 0.86
NL: 1.01E6
RT: 1.35
NL: 2.68E5
RT: 1.76
NL: 4.21E4
RT: 1.96
NL: 9.12E3
RT: 2.55
NL: 5.95E4
RT: 2.67
NL: 5.86E3
RT: 2.91

Urine Catecholamines & Metabolites Assay Kit

Fat-soluble vitamins include vitamins A, D, E, and K. They usually coexist with lipids in natural foods and are absorbed in the intestine in the presence of dietary fat. Because they can readily diffuse through the lipid phase of plasma membranes in the digestive tract and other tissues, their absorption depends on normal lipid digestion and absorption. When fat malabsorption occurs, uptake of fat-soluble vitamins is reduced, leading to corresponding deficiencies. Conversely, long-term excessive intake can cause these vitamins to accumulate in the body and may result in toxicity.

◆ Accurate quantification of 6 catecholamine indicators simultaneously

Analytes

Dopamine
3-Methoxytyramine
Norepinephrine
Metanephrine
Methylmalonic acid
Normetanephrine

Parameters

- **Sample Type:** 24-hour Urine
- **Sample preparation method:** Derivatization method
- **Injection Volume:** 10 uL
- **UHPLC Colomn:** E-UMN
- **Column Temperature:** 40°C
- **Ion Source:** ESI
- **Analysis Time:** 7 minutes/sample
- **Recovery Rate:** 89-112%
- **Intra-assay CV:** <12%
- **Inter-assay CV:** <12%

Plasma Catecholamines & Metabolites Assay Kit

Catecholamines are neurohormones that act as key mediators of autonomic and central nervous system signaling, regulating cardiovascular function, metabolism, and stress responses. Abnormal catecholamine secretion is closely associated with secondary hypertension, pheochromocytoma, neuroblastoma, secondary diabetes and other disorders, making their measurement an important aid in clinical diagnosis and disease monitoring.

Circulating catecholamines are present at very low concentrations and are chemically unstable, being rapidly oxidized and degraded in blood, so they may not accurately reflect true secretion. However, their metabolites are released continuously and are relatively stable over time. Our assay simultaneously measure catecholamines and their major metabolites, enhancing diagnostic sensitivity and helping to reduce false-negative results in the evaluation of catecholamine-related diseases.

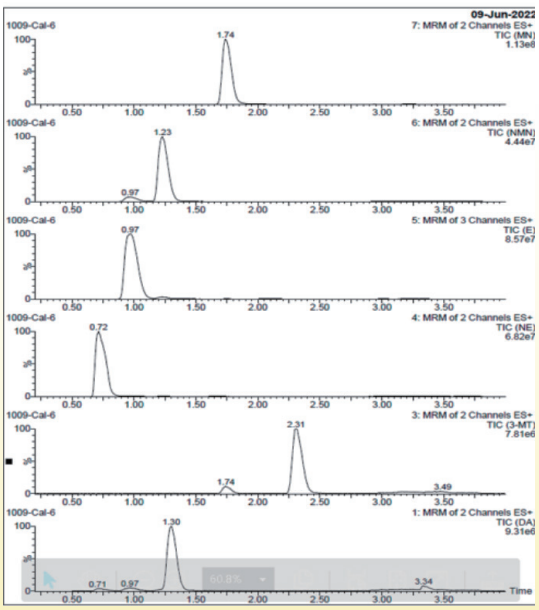
◆ Simultaneous quantification of 6 catecholamine indicators accurately

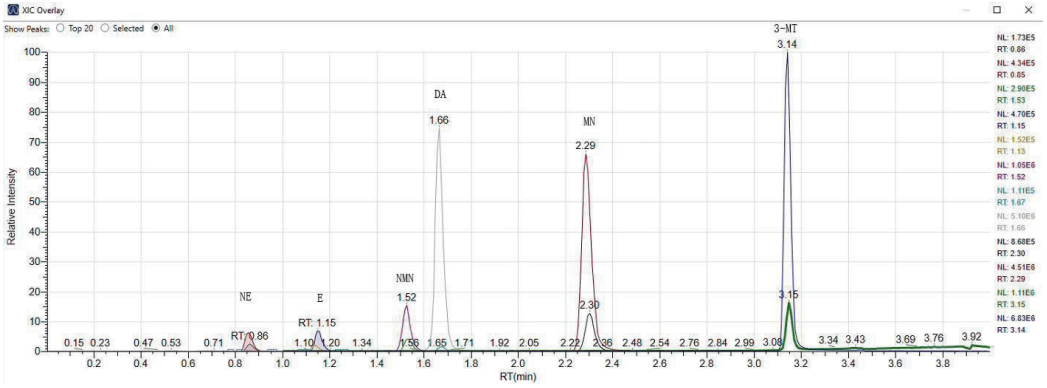
Analytes

Dopamine
3-Methoxytyramine
Norepinephrine
Metanephrine
Methylmalonic acid
Normetanephrine

Parameters

- **Sample Type:** Plasma
- **Sample Preparation Method:** Magnetic Bead Extraction
- **UHPLC Colomn:** E-PMN
- **Column Temperature:** 40°C
- **Injection Volume:** 2-30 uL (subject to instrument sensitivity)
- **Analysis Time:** 4.5 minutes/sample
- **Ion Source:** ESI
- **Recovery Rate:** 89-112%
- **Intra-assay CV:** <12%
- **Inter-assay CV:** <12%




XIC Overlay
Show Peaks: Top 20 Selected All
Relative Intensity
RT(min)
NE
RT: 0.86
E
RT: 1.15
NMN
1.52
DA
1.66
MN
2.29
2.30
3-MT
3.14
3.15
NL: 1.73E5
RT: 0.86
NL: 4.34E5
RT: 0.85
NL: 2.90E5
RT: 1.53
NL: 4.70E5
RT: 1.15
NL: 1.52E5
RT: 1.13
NL: 1.05E6
RT: 1.52
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RT: 1.66
NL: 8.68E5
RT: 2.30
NL: 4.51E6
RT: 2.29
NL: 1.11E6
RT: 3.15
NL: 6.83E6
RT: 3.14

Free T3 & Free T4 Assay Kit

Free triiodothyronine (FT3) and free tetraiodothyronine (FT4) are the physiologically active forms of total triodothyronine (TT3) and total tetraiodothyronine (TT4). FT3 and FT4 levels are a true reflection of hormone metabolism status. They are more sensitive than TT4 and TT3, and would not be interfered by reverse triiodothyronine (rT3) in the serum.

Parameters

- **Sample Type:** Serum
- **Sample preparation method:** Ultrafiltration method
- **Injection Volume:** 2-30 uL (subject to instrument sensitivity)
- **UHPLC Colomn:** E-T3T4
- **Column Temperature:** 40°C
- **Ion Source:** ESI
- **Recovery Rate:** 86-105%
- **Intra-assay CV:** <7%
- **Inter-assay CV:** <10%

Multiple Sex Hormones Assay Kit

Polycystic ovary syndrome (PCOS) is a disease caused by increased male hormones in women. Studies have shown that androgen such as testosterone, androstenedione (A4), 17 a -hydroxyprogesterone (17 a -OHP), dihydrotestosterone (DHT) and dehydroepiandrosterone sulfate (DHEAS) are closely related to PCOS. By testing the above androgen indicators,it could help to distinguish PCOS from other hyperandrogenism.

◆ Accurate quantification of 5 hormones simultaneously

Analytes

Androstenedione (A4)
17 a -Hydroxyprogesterone (17 a -OHP)
Dehydroepiandrosterone Sulfate (DHEAS)
Testosterone

Parameters

- **Sample Type:** Serum
- **Sample preparation method:** Solid-Phase Extraction
- **Injection Volume:** 2-30 pL (subject to instrument sensitivity)
- **UHPLC Colomn:** E-PCOS
- **Column Temperature:** 40°C
- **Ion Source:** ESI
- **Analysis Time:** 5 minutes/sample
- **Limit of Quantitation:** 0.05 ng/mL (Testosterone,17 a-OHP,), 0.1 ng/mL (A4), 10 ng/mL (DHEAS)
- **Linearity:** 0.05-6 ng/mL (Testosterone,17 a-OHP), 0.1-12 ng/mL (A4), 25-3000 ng/mL (DHEAS)
- **Recovery Rate:** 91-108%
- **Intra-assay CV:** <6%
- **Inter-assay CV:** <9%

Multiple Steroid Hormones Assay Kit

Steroid hormones are a class of tetracyclic aliphatic hydrocarbon compounds. The increase or decrease of steroid hormones in the human body is closely related to some clinical diseases,such as congenital adrenal hyperplasia,polycystic ovary syndrome (PCOs), endocrine disorders, adrenal insufficiency and 3-, 17- and 21-hydroxylase deficiency. Each steroid hormone acts as a node in the metabolic network and interacts with each other. If the changes of each hormone level in the metabolic network can be characterized in detail, it is of great significance for diagnosing clinical diseases and monitoring of the endocrine state of the body.

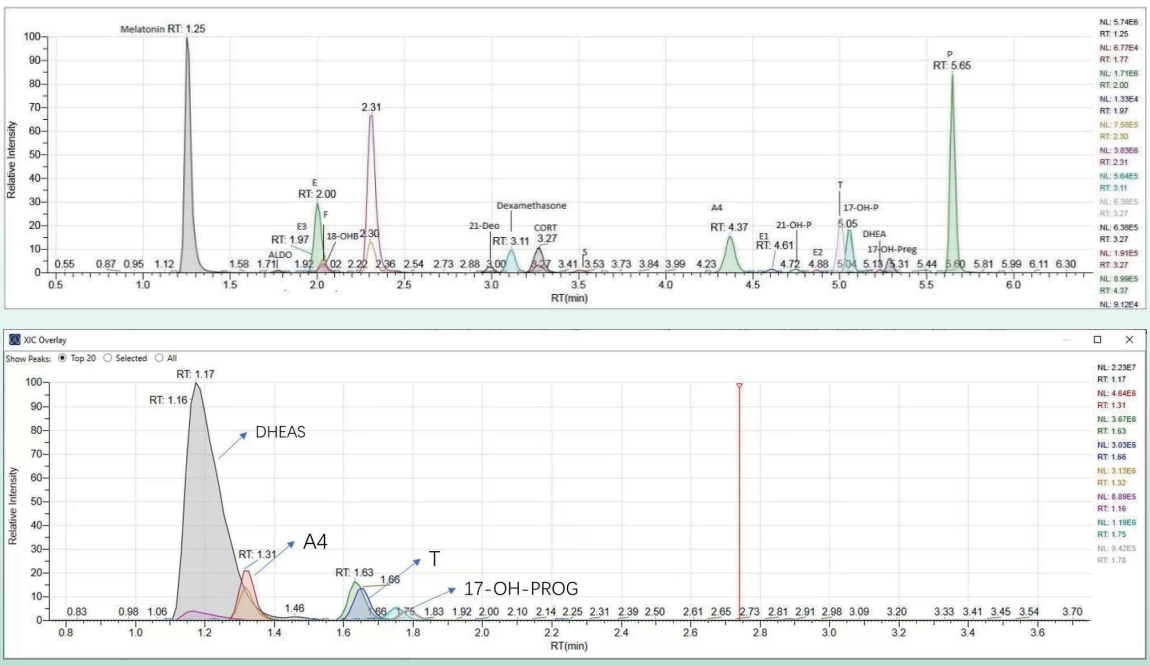
◆ Accurate quantification of 23 steroid hormones simultaneously

Analytes

Aldosterone	Androstenedione	Corticosterone	Cortisol
Cortisone	Dehydroepiandrosterone	11-Deoxycortisol	21-Deoxycortisol
Dihydrotestosterone	Dexamethasone	Estradiol	Estriol
Estrone	18-Hydroxycorticosterone	17-Hydroxyprogesterone	21-Hydroxyprogesterone
17-Hydroxypregnenolone	Progesterone	Testosterone	

Parameters

- **Sample Type:** Serum
- **Sample preparation method:** Solid-Phase Extraction
- **Injection Volume:** 10-30 μL(subject to instrument sensitivity)
- **UHPLC Colomn:** E-Steroid
- **Column Temperature:** 40°C
- **Ion Source:** ESI
- **Analysis Time:** 8 minutes/sample
- **Recovery Rate:** 91-108%
- **Intra-assay CV:** <8%
- **Inter-assay CV:** <11%



Primary aldosteronism-related hormone Assay Kit

Primary aldosteronism (PA) is a leading cause of endocrine hypertension. Accurate measurement of aldosterone and related hormones is critical for early screening and precise diagnosis. Our LC-MS/MS based PA panel simultaneously quantifies six key steroids with high specificity and sensitivity, enabling calculation of the aldosterone-to-renin activity ratio (ARR). This supports effective screening of high-risk patients and differential diagnosis of endocrine causes of hypertension, helping to refine etiological evaluation, guide targeted treatment, and ultimately improve cardio-renal outcomes.

Analytes

Cortisol	Aldosterone	11-Deoxycorticosterone
Cortisone	Angiotensin I,	Angiotensin II

Parameters

- **Sample Type:** Plasma
- **Sample Preparation Method:** Solid-Phase Extraction
- **UHPLC Colomn:**E-PA
- **Injection Volume:** 2-30 uL (subject to instrument sensitivity)
- **Analysis Time:** 8 minutes/sample
- **Column Temperature:** 60°C
- **Ion Source:** ESI
- **Limit of Quantitation:** 2.0 ng/mL (Cortisol), 15 pg/mL (Aldosterone), 10 pg/mL (11-Deoxycorticosterone), 0.5 ng/mL (Cortisone), 0.3 ng/mL (Angiotensin I), 10 pg/mL (Angiotensin II)
- **Recovery Rate:** 85-115%
- **Intra-assay CV:** <15%
- **Inter-assay CV:** <15%

Urinary Multiple Amino Acids & Creatinine Assay Kit

Urinary amino acids, together with creatinine measurement, provide a comprehensive view of amino acid metabolic status and renal tubular handling. This panel is an important screening tool of a broad range of inherited aminoacidopathies and the identification of renal tubular dysfunction (e.g., Fanconi syndrome). It also aids the assessment of nutritional deficiency, metabolic stress, and developmental concerns in pediatric populations.

Creatinine normalization (amino acid/creatinine ratios) minimizes variability caused by urine concentration differences, improving the clinical interpretability of results and enabling more accurate and consistent assessment for early precision medicine.

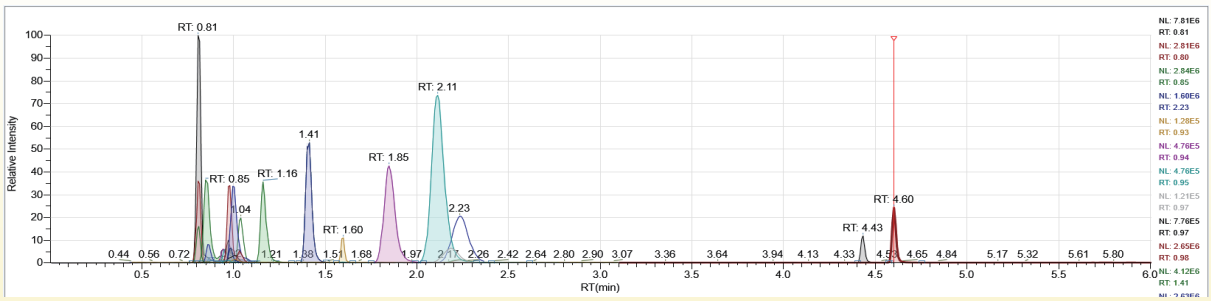
◆ Accurate quantification of 21 amino acids and creatinine simultaneously

Analytes

Alanine	Arginine	Asparagine
Aspartic acid	Citrulline	Creatinine
Glutamic acid	Glutamine	Glycine
Histidine	Isoleucine	Leucine
Lysine	Methionine	Ornithine
Phenylalanine	Proline	Serine
Threonine	Tryptophan	Tyrosine
	Valine	

Parameters

- **Sample Type:** Random urine/24h urine
- **Sample preparation method:** Protein Precipitation
- **Injection Volume:** 0.5-10 uL (subject to instrument sensitivity)
- **UHPLC Column:** N-AA
- **Column Temperature:** 40°C
- **Ion Source:** ESI
- **Analysis Time:** 6 minutes/sample
- **Recovery Rate:** 92-109%
- **Intra-assay CV:** <8%
- **Inter-assay CV:** <8 %



Homocysteine Pathway Metabolites Assay Kit

Homocysteine (Hcy) is a sulfur-containing amino acid that sits at the crossroads of methionine recycling and methylation metabolism. When Hcy is elevated, it often reflects an imbalance within this interconnected pathway rather than a single isolated change—making a combined panel of related metabolites far more informative for interpretation and targeted intervention.

This panel combines Hcy with key pathway metabolites and vitamin-related markers to provides a more comprehensive assessment of the methionine cycle and methylation metabolism, supporting etiologic evaluation of elevated Hcy—such as vitamin B6/B9/B12–related disturbances, inherited enzymatic defects, and renal impairment—thereby enabling more targeted, precise individualized interventions across cardiovascular risk assessment, pregnancy-related complications, neurological evaluation, and nutritional status monitoring.

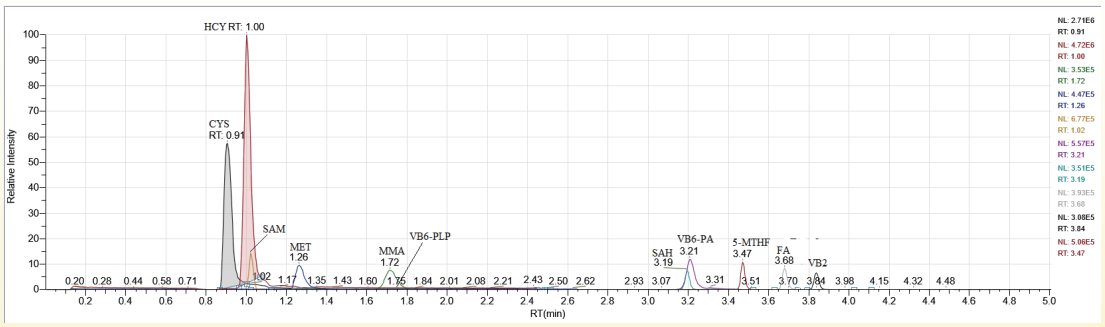
◆ Accurate Quantification of Homocysteine and Related Metabolites

Analytes

Cysteine (Cys)
Homocysteine (Hcy)
Methylmalonic acid (MMA)
4-Pyridoxic acid (4-PA)
Riboflavin (Vitamin B2)
S-Adenosylhomocysteine (SAH)
Folate (Vitamin B9)
Methionine (Met)
5-Methyltetrahydrofolate (5-MTHF)
Pyridoxal-5'-phosphate (PLP)
S-Adenosylmethionine (SAM)

Parameters

- **Sample Type:** Serum/Plasma
- **Sample preparation method:** Ultrafiltration
- **Injection Volume:** 2-10 uL (subject to instrument sensitivity)
- **UHPLC Column:** N-AA
- **Column Temperature:** 40°C
- **Ion Source:** ESI
- **Analysis Time:** 5 minutes/sample
- **Recovery Rate:** 85-113%
- **Intra-assay CV:** <15%
- **Inter-assay CV:** <15 %



Capillary Blood 25-Hydroxyvitamin D Assay Kit

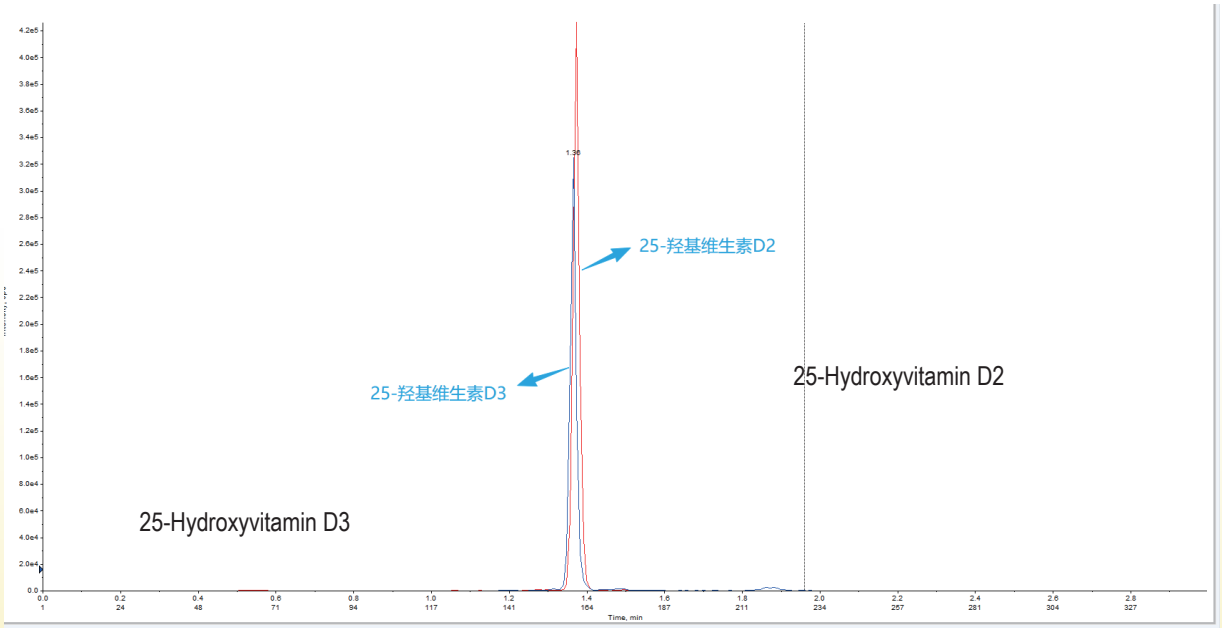
Measurement of 25-hydroxyvitamin D in blood provides an accurate assessment of vitamin D status, which is essential for bone health, calcium and phosphorus metabolism, and immune function. This test is designed for capillary (fingerstick) blood with a micro volume sample requirement, supporting accurate evaluation and follow up monitoring. It aids in the diagnosis and monitoring of vitamin D deficiency or insufficiency, supports management of osteoporosis, rickets, and other metabolic bone disorders, and helps guide precise personalized supplementation and preventive care.

Analytes

25-Hydroxyvitamin D2
25-Hydroxyvitamin D3
Total 25-Hydroxyvitamin D

Parameters

- **Sample Type:** Capillary Blood
- **Sample preparation method:** Derivatization
- **Injection Volume:** 2-20 uL (subject to instrument sensitivity)
- **UHPLC Column:** N-VD
- **Column Temperature:** 40°C
- **Ion Source:** ESI
- **Analysis Time:** 6.5 minutes/sample
- **Limit of Quantitation:** 1 ng/mL
- **Linearity:** 1-100 ng/mL
- **Recovery Rate:** 90-105%
- **Intra-assay CV:** <7%
- **Inter-assay CV:** <9 %



Capillary Blood Fat-Soluble Vitamins A/D/E Assay Kit

Fat-soluble vitamins are essential for childhood growth and development, supporting bone mineralization, immune function, vision, and antioxidant defense. This panel simultaneously quantifies Vitamin A, 25(OH)Vitamin D2, 25(OH)Vitamin D3, and Vitamin E from capillary (fingerstick) blood. Accurate measurement helps identify deficiency or excess, guides personalized supplementation, and supports early detection, follow-up monitoring, and preventive care—particularly for conditions associated with fat-soluble vitamin imbalance, such as rickets, osteoporosis, visual impairment, and oxidative stress–related disorders.

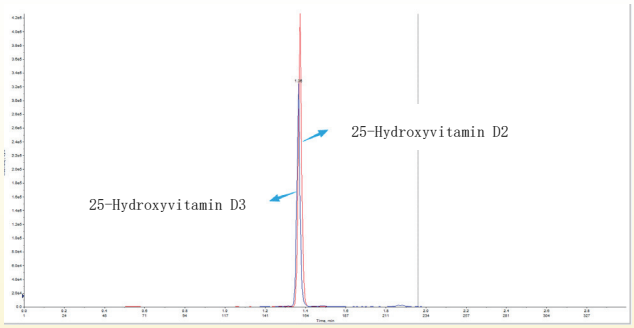
◆ Accurate Quantification of Fat-Soluble Vitamins

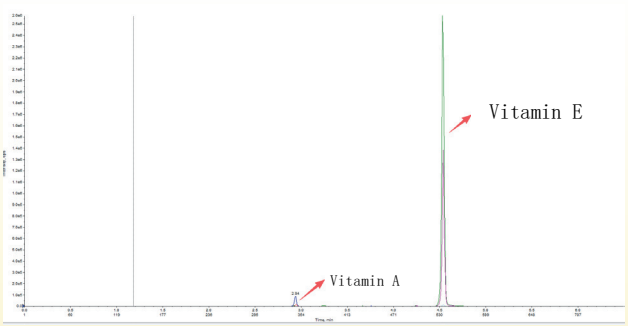
Analytes

25-Hydroxyvitamin D2
25-Hydroxyvitamin D3
Total 25-Hydroxyvitamin D
Vitamin A (Retinol)
Vitamin E (α-Tocopherol)

Parameters

- **Sample Type:** Capillary Blood
- **Sample preparation method:** Derivatization
- **Injection Volume:** 2-20 uL (subject to instrument sensitivity)
- **UHPLC Column:** N-FSV
- **Column Temperature:** 40°C
- **Ion Source:** ESI
- **Analysis Time:** 6.5 minutes/sample
- **Limit of Quantitation:**
- 25-Hydroxyvitamin D2&D3: 1 ng/mL
- **Vitamin A:** 50 ng/mL
- **Vitamin E:** 250 ng/mL
- **Linearity:**
- 25-Hydroxyvitamin D2&D3: 1-100 ng/mL
- **Vitamin A:** 50-5000 ng/mL
- **Vitamin E:** 250-25000 ng/mL
- **Recovery Rate:** 90-105%
- **Intra-assay CV:** <7%
- **Inter-assay CV:** <9%





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