UPLC-MS/MS Product Features



FH-6000MD triple quadrupole mass spectrometry

- Excellent performance and easy operation make it possible for LC-MS/MS testing laboratories.

Unique design of biorthogonal ion source and double TQ ion optics

- FH-6000MD has excellent ionic yield and resistance to matrix with adopting ESpray biorthogonal electrospray ion source technology. FH-6000MD adopts unique triple quadrupole ion guidance technology and triple quadrupole mass analyzer technology to ensure the analytical performance and long-term stability.

Excellent sensitivity

- The product adopts the Step Scan, a kind of newly designed ion transmission technology, which effectively improves the ion transmission efficiency.
- The innovative technology of axial acceleration collision cell improves the collision efficiency greatly.
- The patented technology of pulse counting detection can detect ion signals without loss and filter noise interference effectively.

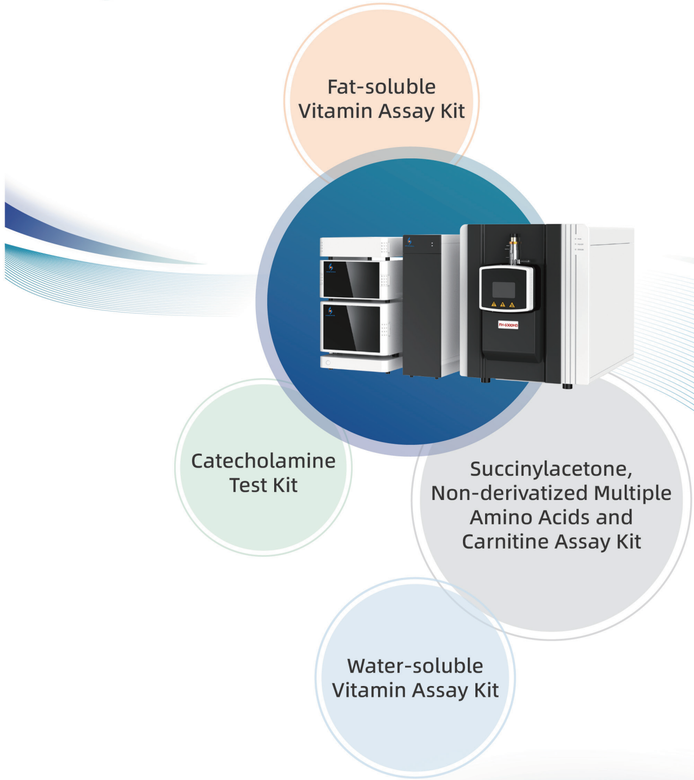
Excellent stability

- Ion source and ion interface with efficient desolvation to increase system tolerance.
- The patented closed-loop adaptive adjustment technology of dual RF power supply improves the stability of quadrupole RF power supply.
- The patented anti temperature and humidity alternating technology is suitable for a wider range of temperature and humidity applications.

Mass Expert mass spectrometry workstation

- The control software and analysis software of completely new Mass Expert mass spectrometry are simple to operate. The function of one-click automatic tuning and mass calibration reduces the complexity of instrument control and the threshold of instrument use. Mass spectrometry analysis software and report template can be customized according to different application fields and different users to meet the use needs of varivous application fields.

— UP-LC-MS/MS System —



FENGHUA

UPLC-MS/MS Solutions for

- New born baby screening
- Full spectrum vitamin
- Catecholamine



24 years
Built in 1999

80% covered
Market in china

5 millions
Babies screened per year

GUANGZHOU FENGHUA BIOTECH CO.,LTD
No.6 Yinyi Street, Guangzhou Development District, Guangdong, China, 510730
Info@microwell-bio.com

— New Born Baby Screening —

The testing process for MSMS test

Sample Collection → **MSMS test** → **Data Analysis**



New born baby blood collection card



FH-6000MD

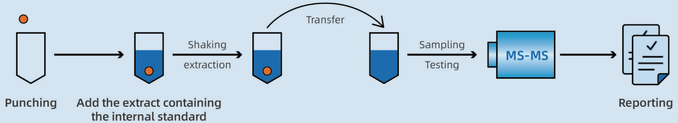


Fenghua Non-derivatized MSMS Kit



Neonatal/MIS

Testing process for **Non-derivatized MSMS**



Punching

Add the extract containing the internal standard

Reporting

Tandem mass spectrometry –Screening over 48 kinds of Disease-NBS

Amino acid metabolic disorders	Organic acid metabolic disorders	Fatty acid metabolic disordters
PKU	IVA	SCAD
BH4D	GA1	SCHAD
GTPCH	MMA	MCAD
TYR- I	3-HMG	MCKAT
TYR- II	HCSD	LCHAD
TYR-III	BTD	VLCAD
MSUD	MUT	TFP
HCY	cb1A	PCD
CPS1D	cb1B	GA- II (MADD)
OTCD	cb1C	CPT- I
CIT- I	3MCC	CPT- II
CIT- II	PA	CACT
ASA	BKT	DECRD
ARG	MAL	
OAT	EE	
HHHS	3-MGA	
MET		
HP		
NKH		

Succinylacetone, Non-derivatized Multiple Amino acids and Carnitines assay kit





— Detectable analytes —

Detectable amino acids

Alanine (Ala)
Arginine (Arg)
Citrulline (Cit)
Glycine (Gly)
Leucine/Isoleucine/Hydroxyproline (Leu/Ile/ProOH)
Methionine (Met)
Phenylalanine (Phe)
Ornithine (Orn)
Valine (Val)
Proline (Pro)
Tyrosine (Tyr)

Detectable ketones

Succinylacetone (SA)

Detectable carnitines

Free carnitine (C0)
Acetylcarnitine (C2)
Propionylcarnitine (C3)
Malonylcarnitine/3-hydroxybutyrylcarnitine (C3DC/C4OH)
Butyrylcarnitine (C4)
Methylmalonylcarnitine/3-hydroxyisovalerylcarnitine (C4DC/C5OH)
Isovalerylcarnitine (C5)
Tiglylcarnitine (C5:1)
Dodecanoylcarnitine (C12)
Dodecenoylcarnitine (C12:1)
Tetradecanoylcarnitine (Myristoylcarnitine) (C14)
Tetradecenoylcarnitine (C14:1)
Tetradecadienoylcarnitine (C14:2)
3-hydroxy-tetradecanoylcarnitine (C14OH)
Hexadecanoylcarnitine (Palmitoylcarnitine) (C16)
Hexadecenoylcarnitine (C16:1)
Glutarylcarnitine/ 3-hydroxyhexanoylcarnitine (C5DC/C6OH)
Hexanoylcarnitine (C6)
Hexanedionylcarnitine (C6DC)
Octanoylcarnitine (C8)
Octenoylcarnitine (C8:1)
Decanoylcarnitine (C10)
Decenoylcarnitine (C10:1)
Decadienoylcarnitine (C10:2)
3-hydroxy-hexadecanoylcarnitine (C16OH)
3-hydroxy-hexadecenoylcarnitine (C16:1OH)
Octadecanoylcarnitine (Stearoylcarnitine) (C18)
Octadecenoylcarnitine (Oleylcarnitine) (C18:1)
Octadecadienoylcarnitine (Linoleycarnitine) (C18:2)
3-hydroxy-octadecanoylcarnitine (C18OH)
3-hydroxy-octadecenoylcarnitine (C18:1OH)

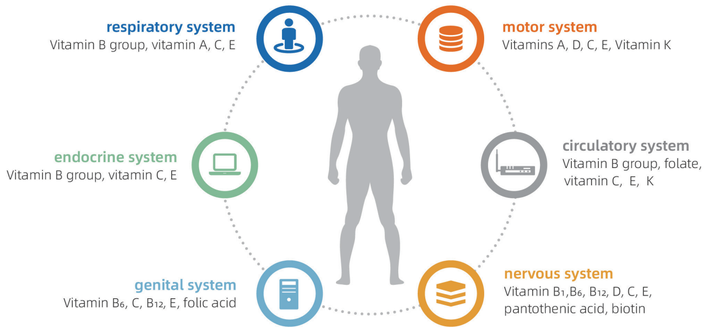
— Catecholamines —

Catecholamines are important neurotransmitters and hormones in the human body.

- Including: dopamine (DA), norepinephrine (NE) & epinephrine (E).
- Metabolites: 3-methoxytyramine (3-MT), methoxynorepinephrine (NMN), methoxyepinephrine (MN), high vanilla acid (HVA) & vanillylmandelic acid (VMA).
- Monitoring the concentration of catecholamines in plasma and urine for pheochromocytoma, paraganglioma, nerve.
- The diagnosis and treatment of blastoma, hypertension, myocardial infarction, adrenal medullary hyperplasia and other diseases have important clinical significance.

— Full Spectrum Vitamins —

Vitamins and systemic metabolism immune system



Our solution:

- **Water-soluble vitamin UPLC-MS/MS test kit**
- **Fat-soluble vitamin UPLC-MS/MS test kit**

