

For Any Technical Questions, Please Contact at info@nodesus.com

Product Name: VERSA 1100 LLE Work Station

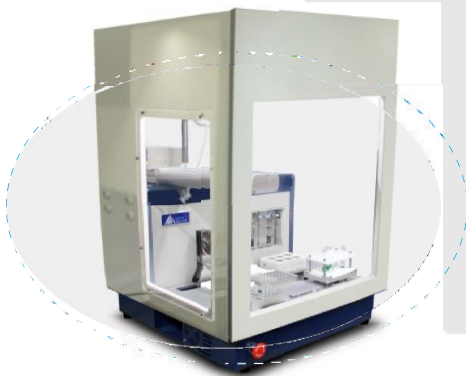
Part Number:

Product Description:

VERSA 1100 Liquid-Liquid Phase Extraction (LLE) Work Station

Liquid-Liquid phase extraction workstations (LLE) are often used to extract analytes for a variety of application sectors- such as health care, forensics, environmental monitoring and academic research. The workstation can automatically perform processes of sample distribution, mixing, fraction transfer, extract fractions are suitable for downstream analysis. In addition, our liquid-liquid extraction workstations can automate sample processing. A protective safetyhood and ventilation system can be included to effectively prevent volatile compounds from escaping into the laboratory, so ensuring the safety of operators. The instrument software can provide researchers with flexible and customizable automation options.

Aurora Biomed VERSA Series provides customers with two liquid-liquid extraction workstation models. With a single-channel steel tip, VERSA 110 liquid-liquid extraction workstation is a compact design. The single-channel pipette ensures accuracy in the range of 1-1000 μ L. VERSA 1100, a four-channel syringe pump with disposable pipette tips, reduces the risk of cross-contamination to the greatest extent. It can automate complete liquid-liquid extraction workflows, steps include sample transfer, reagent addition, shaking extraction mixtures, phase transfer, etc. VERSA 1100 is therefore able to satisfy a wide range of laboratory extraction needs.



VERSA110 liquid-liquid extraction



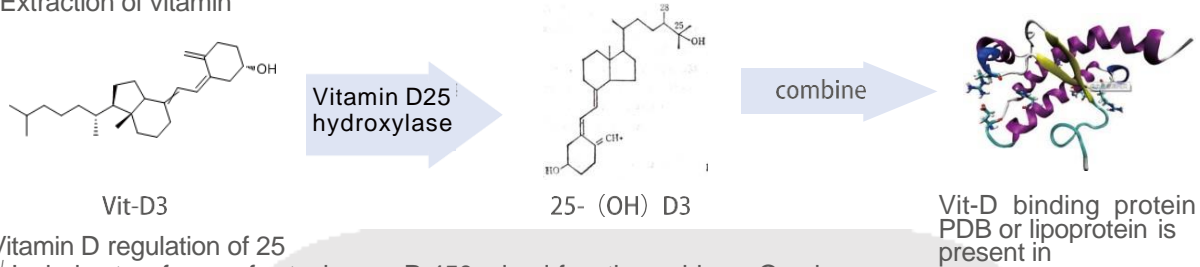
VERSA1100 liquid-liquid extraction

Applications

- ✓ Anti-Doping Analysis
- ✓ Vitamin D in blood/urine
- ✓ Drug Abuse in Forensic Identification and Analysis
- ✓ Compound Purification in Drug Research and Development
- ✓ Isoflavones Separation from Urine
- ✓ Aflatoxin in Seafood
- ✓ Food Safety
- ✓ Growth Promoters in Blood
- ✓ Semi-volatile and Non-volatile Substances

User Cases

Extraction of vitamin



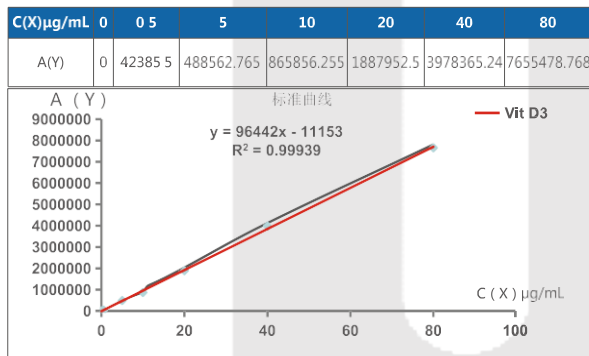
Vitamin D regulation of 25

√ Includes two forms of cytochrome P-450 mixed-function oxidase. One is a affinity and high capacity enzyme in endoplasmic reticulum, and the other high affinity and low capacity enzyme in mitochondria.

√ 25 hydroxylase is mainly regulated by the concentration of vitamin D in liver, and is hardly inhibited by 25-(OH)D3. The cyclic level of 25-(OH)D3

good indicator of vitamin D nutritional status.

Serum Recovery of Vitamin



Recovery rate	5	10	20
Add the concentration(ug/mL)	5	10	20
Add the amount Q1(ug)	15	30	60
A (Y)	1335688.295	2697568.765	4663857.5
Real measurement Q2(ug)	13.96529826	28.08653662	58.81265942
recovery rate % (Q2/Q1)	93.10%	93.62%	98.02%
Recovery rate RSD%	2.8% < 3%		

The recovery rate result analysis
 Recovery rate between **90% and 110%**, recovery rate of **RSD < 3%**. The results conform to the standard. Versa 1100 SPE can enrichment and purification Hydrochloric acid procainamide from the sample.



Kaiser Permanente, the largest non-profit medical institution in the United States, purchased Aurora liquid-liquid extraction workstation to test 25-(OH)D3 content. It found that vitamin D from human serum were highly repeatable with the same extraction rate as manual extraction, saving time.

Cancer
 Reduce the incidence of breast cancer, lung cancer, colon and other

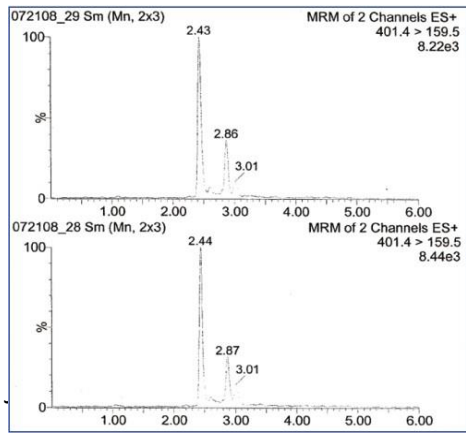
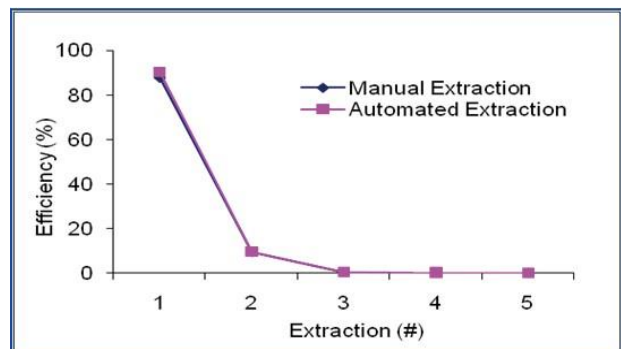
Regulation of Placental Development and
 Regulates the development and function of the placenta. Required prevent pregnancy complications such as abortion, preeclampsia and premature

Prevention and Treatment of vitamin D deficiency are very important for the overall development, especially women and

Importance of Vit-

prevention and of Diseases
 Prevention and treatment of autoimmune diseases, hypertension and infectious diseases

Reducing the Incidence of Disease
 Adequate intrauterine and infant vitamin D can reduce the incidence of type 1 Diabetes, Asthma and



Comparison of extraction rates between instrument extraction and manual

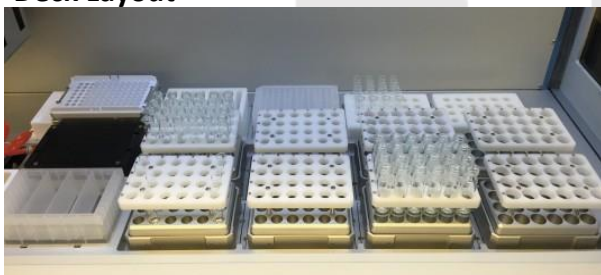
Parallel experimental chromatographic results of vitamin D extraction from human

For Any Technical Questions, Please Contact at info@nodesus.com

Function Features:

- ✓ Choose from disposable pipette tips or fixed steel needle pipette heads
 - ✓ Liquid level detection, for precise phase transfer
 - ✓ High throughput solution for parallel processing of multiple samples
- reduce reagents wasting and consumable use
- ✓ An open modular system supports a variety of consumables and test tubes, including HPLC vials. Through customization, we can support various sizes of consumables
 - ✓ Robotic arm allows for pipetting at various levels from extraction tubes
 - ✓ ReagentDrop system for bulk dispensing of reagents such as water and washing buffers without the use of pipettes
 - ✓ Reagent cooler/heating module, which can be used to hold six 50 ml reagent tubes
 - ✓ Nitrogen dryer module for sample drying
 - ✓ User-friendly, customizable software interface
 - ✓ High-efficiency safetyhood, with HEPA filter and UV light, to ensure no contamination from the external environment
 - ✓ Automation Methods can be customized according to user's protocols
 - ✓ Open system, compatible with various third-party reagents and consumables

Deck Layout



Liquid-liquid extraction workstation disk layout (VERSA1100)

Product Specification:

	VERSA 110	VERSA 1100
Desk Capacity	8	15
Pipetting Head	Single Channel w/Dual Injection	4 or 8 channels with single channel functionality
Reagent Drop	Up to 4 channels	Up to 8 channels
Matched Consumables Type	24 or 48 test tubes/vials 96 deep-hole discs	24 test tubes/vials 96 deep-hole discs

For Any Technical Questions, Please Contact at info@nodesus.com

Tray Mover System	Shifting Tray	Manipulator
Reagent Tank/Cooling Plate	One of the two	One of the two
Nitrogen Drying Modules	N/A	24 or 96 channels
Heating Oscillator(2400RPM,RT-90°C)	Standard	Standard
Liquid Level Detection	Optional	Optional
High efficiency safety hood with HEPA filter	Optional	Optional
L*W*H(cm)	59*66*90	99*75*90
Weight(Kg)	40	162

