WEPURE
微纯生物科技

Solid Phase Extraction Product Manual

The Purer The Better

About WePure Biotech

WePure Biotech is committed to "Becoming an excellent supplier of Global Analysis,Testing,Separation & Purification Solution " .It is one of the few manufacturers in the world that fully masters the preparation technology of liquid chromatography silica gel and resin material. With more than 20 years of industry experience,the team has accumulated rich product application and method development experience. The company possesses a complete industrial chain that covers the production of raw material monomers for silica gel and resin microspheres,internationally leading surface bonding modification technology,analytical column,semi-prep column,and preparation packing material. It provides high-quality,cost-effective,stable supply,and rapid delivery of products and services to industries such as pharmaceutical,biotechnology,food safety,chemical,and environment.

Main products

- MicroPulite® analytical Columns
- BioPulite®: Bioanalytical column
- PrePulite® Semi-Prep Columns/Semi-prep and Industrial Preparative Matersrial
- Upulite® Sample Pre-Prep Packing Material /SPE
- WeChromlite® Guard Column of analytical /Semi-Prep column

WePure Biotech's three technology platforms

01 Stable porous microsphere syntheses technology

WePure can produce microsphere in a stable and large scale, includes 1.7μm-100μm high-purity silica,organic-inorganic structure hybrid silica（XP）and high-strength silica（HSS）,inorganic-inorganic structure hybridized SiZ microspheres and so on.

02 Advanced surface modification technology

WePure provides triple bond C18/C8,double bond C18/C8,single bond C18/C8, NH_2,Amide,Hexyl-Phenyl,Fluoro-Phenyl（PFP）,Diol,RP18/18 Plus,PHS charged modification technology,unique T3 bond technology,mix mode bond technology,meet the needs of analysis,separation and purification.

03 High efficient and stable columns packing platform

WePure products cover UPLC、UHPLC、HPLC and semi-preparative columns、with stable production technology and strict testing、ensure excellent stability and reproducibility of column to column,batch to batch.

WePure has a 1,950 square meter R&D, production and application development base in the Guangdong Medical Valley National Incubation Park in Nansha District, Guangzhou, China、and a 5,000 square meter production base in a subsidiary of WePure Biotech(Foshan). The Company purchased 40 acres of M3 industrial land in Guangdong Wengyuan Innovative API Industrial Park in December 2023,and is building its own 21,000 square meters production base.

"WePure" Headquarter located in Guangdong

"WePure" production base in Foshan

"WePure" production base in Shaoguan Guangdong

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1. SPE Overview

1.1 The basic principle of SPE technique

Solid-Phase Extraction (SPE) is a sample pretreatment technique developed in recent years, developed from the combination of liquid-solid extraction and liquid chromatography. SPE is mainly used for Sample separation, purification, concentration and enrichment, achieve the purpose of reducing the interference and improving sensitivity.

The technique utilizes a solid sorbent to adsorb the target compounds in the liquid sample, separate them from the matrix and interfering substance, then elute with an eluent , to achieve the purpose of separating and enriching target compounds.

Compared with the traditional liquid-liquid extraction method, SPE can improve the recovery, separate the analytes from the interferents more effectively, reduce sample pretreatment process, and operate in a simple, time-saving and labor-saving manner. It has been widely used in medicine, food, environment, chemical industry and other fields.

1.2 Basic Terminology for Solid Phase Extraction Techniques

Matrix: the sample environment , the matrix usually contains a large number of interferences;

Sorbent: the filler of SPE, usually a porous polymer or chemically bonded to silica , used to selectively certain types of compounds from the sample ;

Target compounds: compounds that need to be analysis and separated from a complex sample;

Interferents: Except the target compound, many substances are present in the sample matrix;

Selectivity: the ability to retain the target compound while other interferents have no retention;

Retention capacity: the amount of analyte or the amount of interferents that can be retained by a given mass of sorbent in a given solvent environment;

pH: the negative logarithm of the protons concentration in a solution, the smaller the value ,the higher the concentration of protons the more acidic it is;

pKa: the negative logarithm of the dissociation constant Ka. For acidic compounds, the smaller the value , the stronger the dissociation of acid, the stronger the acid ; for basic compounds,the larger the value , the stronger the ability of binding protons , the more basic it is;

Nonpolar interaction: the interaction between analyte functional groups and nonpolar sorbent surface functional groups ;

Polar interaction: interaction between analyte dipole moment and a similar functional group in the sorbent;

Ion exchange: interaction between ionic target compounds and opposite charges of sorbent;

Condition and Equilibration: addition of suitable solvents to unfold functional groups of sorbent ,and remove possible interferences on the sorbent;

Wash: after loading, add a suitable solvent to remove interfering substances without affect the retention of target compounds;

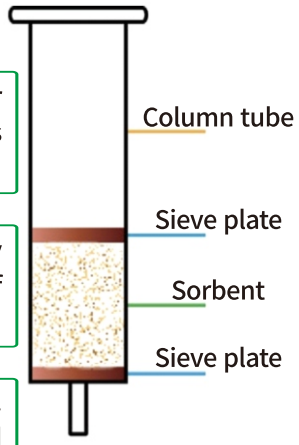
Elution: The solvent with strong elution ability separates the compound from the sorbent by breaking the force between the sorbent and the retained compound;

Penetration: The target analyte is eluted during loading , when the retention capacity of sorbent is weak or the mass of compound exceeds the capacity of adsorbent;

Retention: when the sample pass through the sorbent, the sorbent and some compounds have a greater force than compound and solvent, the compound will be sorbent adsorption process.

1.3 SPE Column Structure

Generally, SPE consists of three parts: column tube, sieve plate and sorbent.



Column tube	the carrier of sorbent, usually made of polypropylene, for special analytical requirements can be made of glass(such as Plasticizer);
Sieve plate	used to fix sorbent and filter impurities in solution. Usually made of polyethylene, for special samples can also be made of glass, stainless steel and other materials;
sorbent	the core part of the SPE , playing a separation function of SPE. The most common sorbents are silica bonded adsorbents and organic polymer adsorbents.

1.4 SPE Routine Procedures

Condition/Equilibration

The column bed is solvated to create an environment in which the sample substrate interacts repeatably with the SPE sorbent. The column bed is washed with a certain volume of suitable solvent, then washed by a solvent with similar characteristics to the sample substrate solven.

Retention

The sample is added to the activated SPE column, the analyte and other sample matrix components are retained on the adsorbent by one or more forces (such as van der Waals force, non-polar interaction force, etc.), and the remaining interferences flow out of the column with the sample solvent.

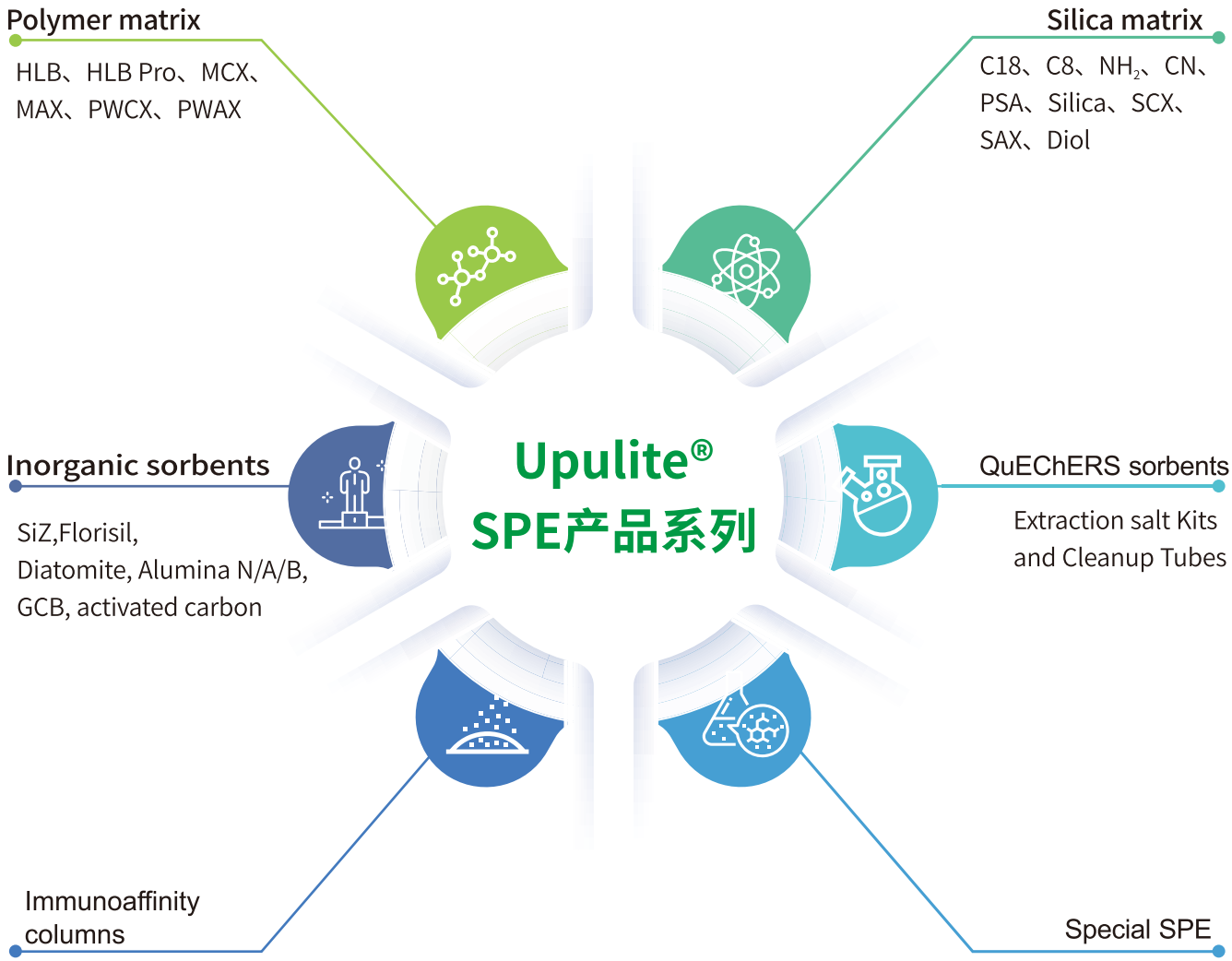
Wash

The column is washed with a solution with stronger elution strength than the sample solvent, to wash away the interfering components and keep the analyte on the column bed.

Elution

The column bed is washed with a suitable solvent that can break the interaction between analyte and sorbent to selectively eluate the target analyte.

1. SPE Products and Ordering Information



Polymer matrix

HLB、HLB Pro、MCX、
MAX、PWCX、PWAX

Silica matrix

C18、C8、NH_2、CN、
PSA、Silica、SCX、
SAX、Diol

Inorganic sorbents

SiZ,Florisil,
Diatomite, Alumina N/A/B,
GCB, activated carbon

QuEChERS sorbents

Extraction salt Kits
and Cleanup Tubes

Immunoaffinity columns

Aflatoxin B1 immunoaffinity column, Aflatoxin total immunoaffinity column,Aflatoxin M1 immunoaffinity column, Aflatoxin B1, B2, G1, G2, M1, M2 immunoaffinity column,Zearalenone immunoaffinity column, Deoxynivalenol immunoaffinity column, Ochratoxin immunoaffinity column, T-2 toxin immunoaffinity column, fumonisin immunoaffinity column, heparin immunoaffinity column, VB12 immunoaffinity column

Special SPE

tea pesticide residue(TPT), benzo pyrene, plasticizer, bisphenol A, Sudan red, plant growth agent, oligosaccharides in honey, VD, TCMP, PWR, benzo pyrene molecularly imprinted column, special SPE for pesticide residue detection in oil samples, special SPE for pesticide and animal residue detection in dairy products, C18 pre-treatment special SPE, AFT special SPE, special SPE for pesticide residue detection of pyrethroids in traditional Chinese medicine, special SPE for animal residue detection, special SPE for glyphosate, special SPE for polycyclic aromatic hydrocarbons, special SPE for mixed ion silica , and alkaline silica SPE

Upulite® Polymer Matrix sorbents

Upulite® polymer matrix sorbent overcomes the shortcomings of traditional silica matrix , with a wide pH range, no active hydroxyl groups on the surface, high capacity, high recovery rate, etc. It has a wide range of applications in the fields of food, environment, and clinic, etc., and is available in the following types HLB, HLB Pro, MCX, MAX, PWCX, PWAX and other types are available.

Upulite® HLB

HLB is a hydrophilic-lipophilic balanced sorbent prepared by a special co-polymerization technique, containing a specific ratio of hydrophilic and hydrophobic groups. The hydrophilic N-vinyl pyrrolidone structure retains polar compounds and the hydrophobic divinylbenzene structure retains non-polar compounds.

【HLB Performance characteristics】

- ✓ General purpose reversed-phase sorbent
- ✓ Water wettable ,is not afraid to drain solvent once wetted ,can skip condition and equilibration steps
- ✓ pH stable from 0-14
- ✓ Large specific surface area, sample loading and adsorption capacity is much larger than C18 sorbent

【HLB Use Procedure】

Condition/Equilibration: 3mL methanol condition, 3mL water equilibrate

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Load: add sample to SPE column

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Wash: 3mL of 5% methanol aqueous solution.

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Elute: 3mL methanol elute (can be divided into 2~3 times), collect the eluent

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Concentrate and re-dissolve with suitable solvent

【Ordering Information】

Part Number	Product Description
WE60PPA-001	HLB SPE,30mg/1mL,100/PK
WE60PPA-002	HLB SPE,60mg/3mL,50/PK
WE60PPA-003	HLB SPE,100mg/6mL,30/PK
WE60PPA-004	HLB SPE,150mg/6mL,30/PK
WE60PPA-005	HLB SPE,200mg/3mL,50/PK
WE60PPA-006	HLB SPE,200mg/6mL,30/PK
WE60PA-007	HLB SPE,500mg/3mL,50/PK
WE60PA-008	HLB SPE,500mg/6mL,30/PK
WE60PA-009	HLB SPE,500mg/12mL,20/PK
WE60PA-010	HLB SPE,60mg/6mL,30/PK
WE60PA-011	HLB SPE,1g/6mL,30/PK

Part Number	Product Description
WE60PA-012	HLB SPE,300mg/6mL,30/PK
WE60PA-013	HLB SPE,250mg/6mL,30/PK
WE60PA-014	HLB SPE,150mg/3mL,50/PK
WE60PA-015	HLB SPE,10mg/1mL,100/PK
WE60PA-016	HLB SPE,60mg/1mL,100/PK
WE60PA-017	HLB SPE,30mg/3mL,50/PK

Upulite® HLB Pro

【HLB Pro Performance characteristics 】

- ✓ No need of condition and equilibrate, samples can load directly on the sample
- ✓ Removes effectively interferences such as phospholipids, pigments, fats, etc., and suitable for analysis of a wide range of substances (e.g., multi-veterinary residues).

【HLB Pro Use Procedure】

Load：the sample passes through SPE, the target is not retained.

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Collection： Collect Elution

【Ordering Information】

Part Number	Product Description
WE60PB-001	HLB Pro SPE,30mg/1mL,100/PK
WE60PB-002	HLB Pro SPE,60mg/3mL,50/PK
WE60PB-003	HLB Pro SPE,100mg/6mL,30/PK
WE60PB-004	HLB Pro SPE,150mg/6mL,30/PK
WE60PB-005	HLB Pro SPE,200mg/3mL,50/PK
WE60PB-006	HLB Pro SPE,200mg/6mL,30/PK
WE60PB-007	HLB Pro SPE,500mg/3mL,50/PK
WE60PB-008	HLB Pro SPE,500mg/6mL,30/PK
WE60PB-009	HLB Pro SPE,500mg/12mL,20/PK
WE60PB-010	HLB Pro SPE,60mg/6mL,30/PK
WE60PB-011	HLB Pro SPE,1g/6mL,30/PK
WE60PB-012	HLB Pro SPE,300mg/6mL,30/PK
WE60PB-013	HLB Pro SPE,250mg/6mL,30/PK
WE60PB-014	HLB Pro SPE,150mg/3mL,50/PK
WE60PB-015	HLB Pro SPE,10mg/1mL,100/PK
WE60PB-016	HLB Pro SPE,60mg/1mL,100/PK
WE60PB-017	HLB Pro SPE,30mg/3mL,50/PK

MCX

MCX is mixed-mode cation exchange sorbent obtained by bonding a sulfuric acid group to a highly cross-linked PS/DVB surface. MCX has dual retention including cation exchange and reversed-phase , and is suitable for the retention and separation of basic compounds.

【MCX Performance characteristics】

- ✓ Selective for basic compounds
- ✓ Large specific surface area, high ion exchange capacity
- ✓ pH stable from 0-14

【MCX Use Procedure】

condition/equilibration: 3mL methanol condition, 3mL water equilibrate

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Load : Add sample to SPE column

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wash 1: 2% formic acid water wash

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wash 2: methanol - water solution/methanol wash

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Elute: 5% amonium methanol elute (can be divided into 2~3 elutions),collect the eluent

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Concentrate and reconstitute with suitable solvent

【Ordering Information】

Part Number	Product Description
WE60PC-001	MCX SPE,30mg/1mL,100/PK
WE60PC-002	MCX SPE,60mg/3mL,50/PK
WE60PC-003	MCX SPE,90mg/6mL,30/PK
WE60PC-004	MCX SPE,150mg/6mL,30/PK
WE60PC-005	MCX SPE,200mg/6mL,30/PK
WE60PC-006	MCX SPE,500mg/12mL,20/PK
WE60PC-007	MCX SPE,1g/20mL,20/PK
WE60PC-008	MCX SPE,600mg/3mL,50/PK
WE60PC-009	MCX SPE,500mg/6mL,30/PK
WE60PC-010	MCX SPE,150mg/3mL,50/PK
WE60PC-011	MCX SPE,250mg/6mL,30/PK
WE60PC-012	MCX SPE,500mg/3mL,50/PK
WE60PC-013	MCX SPE,30mg/3mL,50/PK
WE60PC-014	MCX SPE,60mg/1mL,100/PK
WE60PC-015	MCX SPE,1g/12mL,20/PK
WE60PC-016	MCX SPE,60mg/1mL,100/PK
WE60PC-017	MCX SPE,1g/12mL,20/PK

MAX

MAX is mixed-mode anion exchange sorbent obtained by bonding quaternary amine groups to highly cross-linked PS/DVB surfaces, MAX has dual retentionincluding anion-exchange and reversed-phase retention, and is suitable for the retention and separation of acid compounds.

【MAX Performance characteristics】

- ✓ Selective for acid compounds
- ✓ Water wettability, good stability
- ✓ pH stable from 0-14

【MAX Use Procedure】

Condition/Equilibration: 3mL methanol condition, 3mL water equilibrate

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Load：Add sample to SPE column

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wash 1：5% ammonia solution wash

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wash 2：methanol - water solution/methanol wash

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Elute：2% formic acid methanol elute(can be divided into 2~3 elutions) ,collect the eluent

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Concentrate and reconstitute with a suitable solvent

【Ordering Information】

Part Number	Product Description
WE60PE-001	MAX SPE,30mg/1mL,100/PK
WE60PE-002	MAX SPE,60mg/3mL,50/PK
WE60PE-003	MAX SPE,150mg/6mL,30/PK
WE60PE-004	MAX SPE,200mg/6mL,30/PK
WE60PE-005	MAX SPE,500mg/6mL,30/PK
WE60PE-006	MAX SPE,500mg/12mL,20/PK
WE60PE-007	MAX SPE,1g/20mL,20/PK
WE60PE-008	MAX SPE,200mg/3mL,50/PK
WE60PE-009	MAX SPE,60mg/1mL,100/PK
WE60PE-010	MAX SPE,30mg/3mL,50/PK
WE60PE-011	MAX SPE,1g/12mL,20/PK

PWCX

PWCX is a weak cation exchange mixed-mode sorbent based on PS/DVB modified by carboxyl groups, with both cation exchange and reversed-phase modes, and is suitable for strong basic compounds (e.g. quaternary ammonium bases)

【PWCX Performance characteristics】

- ✓ Selective for strong basic compounds
- ✓ pH stable from 0-14

【PWCX Use Procedure】

Condition/Equilibration: 3mL methanol condition, 3mL water equilibrate

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Load：Load sample on SPE

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Wash 1：5% ammonia solution wash

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Wash 2: methanol - water solution/methanol wash

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Elute: 2% formic acid methanol elute (can be divided into 2~3 elutions) ,collect the eluent

↓

Concentrate and reconstitute with suitable solvent

【Ordering Information】

Part Number	Product Description
WE60PD-001	PWCX SPE, 30mg/1mL,100/PK
WE60PD-002	PWCX SPE, 60mg/3mL,50/PK
WE60PD-003	PWCX SPE, 150mg/6mL,30/PK
WE60PD-004	PWCX SPE, 200mg/3mL,50/PK
WE60PD-005	PWCX SPE, 500mg/3mL,50/PK
WE60PD-006	PWCX SPE, 500mg/6mL,30/PK
WE60PD-007	PWCX SPE, 1g/6mL,30/PK
WE60PD-008	PWCX SPE, 60mg/1mL,100/PK
WE60PD-009	PWCX SPE, 30mg/3mL,50/PK
WE60PD-010	PWCX SPE, 200mg/6mL,30/PK
WE60PD-011	PWCX SPE, 500mg/12mL,20/PK
WE60PD-012	PWCX SPE, 1g/12mL,20/PK

PWAX

PWAX is weak anion-exchange mixed-mode sorbent on PS/DVB matrix modified with piperazine groups, with both anion-exchange and reversed-phase modes, and is suitable for strong acid compounds (e.g., sulfonic acid compounds)

【PWAX Performance characteristics】

- ✓ Selective for strong acid compounds
- ✓ pH stable from 0-14

【PWAX Use Procedure】

Condition/equilibration: 3mL methanol condition, 3mL water equilibrate

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Load: Add sample to SPE column

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Wash 1: 2% formic acid water wash

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Wash 2: methanol - water solution/Methanol wash

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Elute: 5% amonium methanol elute (can be divided into 2~3 elutions),collect the eluent

↓

Concentrate and reconstitute with suitable solvent

【Ordering Information】

Part Number	Product Description
WE60PF-001	PWAX SPE, 30mg/1mL,100/PK
WE60PF-002	PWAX SPE, 60mg/3mL,50/PK
WE60PF-003	PWAX SPE, 150mg/6mL,30/PK
WE60PF-004	PWAX SPE, 200mg/6mL,30/PK
WE60PF-005	PWAX SPE, 500mg/6mL,30/PK
WE60PF-006	PWAX SPE, 500mg/12mL,20/PK
WE60PF-007	PWAX SPE, 1g/20mL,20/PK
WE60PF-008	PWAX SPE, 60mg/1mL,100/PK
WE60PF-009	PWAX SPE, 30mg/3mL,50/PK
WE60PF-010	PWAX SPE, 1g/12mL,20/PK

Upulite® Silica Matrix sorbents

Silica matrix sorbents are widely used, and stable from pH 2-8.Silica matrix sorbent can be divided into three retention modes of narmal phase, reverse phase and ion exchange mode, based on the difference in the type of bonded functional groups. Upulite® silica matrix sorbents include C18, C8, NH_2, CN, PSA, Silica, SCX, SAX, Diol,and so on.

C18

C18 SPE is made of octadecyl bond to silica , which has excellent retention characteristics for non-polar compounds and suitable for most compounds, C18 is the most widely used sorbent and applied to food，environment and other fields.

【Ordering Information】

Part Number	Product Description
WE60SA-001	C18 SPE,60mg/3mL,50/PK
WE60SA-002	C18 SPE,100mg/3mL,50/PK
WE60SA-003	C18 SPE,200mg/3mL,50/PK
WE60SA-004	C18 SPE,200mg/6mL,30/PK
WE60SA-005	C18 SPE,500mg/3mL,50/PK
WE60SA-006	C18 SPE,500mg/6mL,30/PK
WE60SA-007	C18 SPE,1g/6mL,30/PK
WE60SA-008	C18 SPE,2g/12mL,20/PK
WE60SA-009	C18 SPE,5g/20mL,20/PK
WE60SA-010	C18 SPE,10g/60mL,10/PK
WE60SA-011	C18 SPE,50mg/3mL,50/PK
WE60SA-012	C18 SPE,30mg/1mL,100/PK
WE60SA-013	C18 SPE,300mg/3mL,50/PK
WE60SA-014	C18 SPE,150mg/6mL,30/PK
WE60SA-015	C18 SPE,1g/3mL,50/PK
WE60SA-016	C18 SPE,100mg/1mL,100/PK
WE60SA-017	C18 SPE,10mg/1mL,100/PK
WE60SA-018	C18 SPE,1g/12mL,20/PK
WE60SA-019	C18 SPE,300mg/6mL,30/PK
WE60SA-020	C18 SPE,50mg/1mL,100/PK

C8

C8 is a medium hydrophobic reversed-phase silica matrix sorbent that retains nonpolar compounds.C8 has a shorter carbon chain and is less hydrophobic than C18, so nonpolar compounds that are difficult to elute on C18 can be considered for replacement with C8. C8 sorbent can also be used for separation of compounds with large molecular weights.

【Ordering Information】

Part Number	Product Description
WE60SB-001	C8 SPE,100mg/1mL,100/PK
WE60SB-002	C8 SPE,200mg/3mL,50/PK
WE60SB-003	C8 SPE,500mg/6mL,30/PK
WE60SB-004	C8 SPE,1g/6mL,30/PK
WE60SB-005	C8 SPE,2g/12mL,20/PK
WE60SB-006	C8 SPE,5g/20mL,20/PK
WE60SB-007	C8 SPE,10g/60mL,10/PK
WE60SB-008	C8 SPE,500mg/12mL,20/PK
WE60SB-009	C8 SPE,50mg/1mL,100/PK
WE60SB-010	C8 SPE,500mg/3mL,50/PK
WE60SB-011	C8 SPE,1g/12mL,20/PK

NH_2

NH_2 is an aminopropyl bonded to silica sorbent, used under normal or reverse phase conditions. When using non-polar solvents such as hexane, the NH_2 column can hydrogen-bond with OH, NH, SH and other groups; it can be used as a weak anion exchange sorbent under reversed-phase.

【Ordering Information】

Part Number	Product Description
WE60SC-001	NH_2 SPE,100mg/1mL,100/PK
WE60SC-002	NH_2 SPE,200mg/3mL,50/PK
WE60SC-003	NH_2 SPE,500mg/3mL,50/PK
WE60SC-004	NH_2 SPE,500mg/6mL,30/PK
WE60SC-005	NH_2 SPE,1g/6mL,30/PK
WE60SC-006	NH_2 SPE,5g/20mL,20/PK
WE60SC-007	NH_2 SPE,6g/60mL,10/PK
WE60SC-008	NH_2 SPE,2g/12mL,20/PK
WE60SC-009	NH_2 SPE,30mg/1mL,100/PK
WE60SC-010	NH_2 SPE,250mg/3mL,50/PK
WE60SC-011	NH_2 SPE,250mg/6mL,30/PK
WE60SC-012	NH_2 SPE,1g/12mL,20/PK
WE60SC-013	NH_2 SPE,200mg/6mL,30/PK

CN

CN is a cyanopropyl bonded to silica sorbent with both polar and nonpolar interactions, and can be used under normal or reverse phase conditions. It can extract nonpolar or weakly polar compounds from aqueous solutions under reversed-phase conditions and polar compounds from nonpolar solvents under normal-phase conditions.

【Ordering Information】

Part Number	Product Description
WE60SD-001	CN SPE,100mg/1mL,100/PK
WE60SD-002	CN SPE,200mg/3mL,50/PK
WE60SD-003	CN SPE,500mg/3mL,50/PK
WE60SD-004	CN SPE,1g/6mL,30/PK
WE60SD-005	CN SPE,2g/12mL,20/PK
WE60SD-006	CN SPE,5g/20mL,20/PK
WE60SD-007	CN SPE,250mg/3mL,50/PK
WE60SD-008	CN SPE,250mg/6mL,30/PK
WE60SD-009	CN SPE,1g/12mL,20/PK

PSA

PSA sorbent is made of ethylenediamine-N-propyl bonded to silica, and similar to NH_2, PSA has weak anion exchange and normal phase retention.It has two amino groups (Pka 10.1 and Pka10.9), thus has a stronger anion exchange capacity than NH_2 sorbent.

【Ordering Information】

Part Number	Product Description
WE60SE-001	PSA SPE,100mg/1mL,100/PK
WE60SE-002	PSA SPE,200mg/3mL,50/PK
WE60SE-003	PSA SPE,500mg/3mL,50/PK
WE60SE-004	PSA SPE,500mg/6mL,30/PK
WE60SE-005	PSA SPE,1g/6mL,30/PK
WE60SE-006	PSA SPE,2g/12mL,20/PK
WE60SE-007	PSA SPE,5g/20mL,20/PK
WE60SE-008	PSA SPE,250mg/3mL,50/PK
WE60SE-009	PSA SPE,1g/12mL,20/PK

Silica

Silica is an unbonded silica sorbent that retains polar compounds in the sample when used under normal phase conditions.

【Ordering Information】

Part Number	Product Description
WE60SF-001	Silica SPE,100mg/1mL,100/PK
WE60SF-002	Silica SPE,200mg/3mL,50/PK
WE60SF-003	Silica SPE,500mg/3mL,50/PK
WE60SF-004	Silica SPE,500mg/6mL,30/PK
WE60SF-005	Silica SPE,1g/6mL,30/PK
WE60SF-006	Silica SPE,2g/12mL,20/PK
WE60SF-007	Silica SPE,5g/20mL,20/PK
WE60SF-008	Silica SPE,2g/6mL,30/PK
WE60SF-009	Silica SPE,1g/12mL,20/PK

SCX

SCX is a strong cation exchange silica sorbent by bonding benzenesulfonic acid groups to silica matrix, and suitable for analyzing basic compounds.

【Ordering Information】

Part Number	Product Description
WE60SG-001	SCX SPE,60mg/3mL,50/PK
WE60SG-002	SCX SPE,100mg/1mL,100/PK
WE60SG-003	SCX SPE,200mg/3mL,50/PK
WE60SG-004	SCX SPE,500mg/3mL,50/PK
WE60SG-005	SCX SPE,500mg/6mL,30/PK
WE60SG-006	SCX SPE,1g/6mL,30/PK
WE60SG-007	SCX SPE,2g/12mL,20/PK
WE60SG-008	SCX SPE,100mg/12mL,20/PK
WE60SG-009	SCX SPE,250mg/3mL,50/PK
WE60SG-010	SCX SPE,250mg/6mL,30/PK
WE60SG-011	SCX SPE,1g/12mL,20/PK

SAX

SAX is a strong anion-exchange silica sorbent by bonding quaternary ammonium groups to silica matrix, and suitable for analyzing acid compounds such as carboxylic acid compounds.

【Ordering Information】

Part Number	Product Description
WE60SH-001	SAX SPE, 100mg/1mL,100/PK
WE60SH-002	SAX SPE, 200mg/3mL,50/PK
WE60SH-003	SAX SPE, 500mg/3mL,50/PK
WE60SH-004	SAX SPE, 500mg/6mL,30/PK
WE60SH-005	SAX SPE, 1g/6mL,30/PK
WE60SH-006	SAX SPE, 2g/12mL,20/PK
WE60SH-007	SAX SPE, 5g/20mL,20/PK
WE60SH-008	SAX SPE, 60mg/1mL,100/PK
WE60SH-009	SAX SPE, 30mg/1mL,100/PK
WE60SH-010	SAX SPE, 100mg/3mL,50/PK
WE60SH-011	SAX SPE, 200mg/6mL,30/PK
WE60SH-012	SAX SPE, 1g/12mL,20/PK
WE60SH-013	SAX SPE, 150mg/3mL,50/PK

Diol

Diol is a diol grounp bonded to silica matrix sorbent, it is polar and is used under normal or reverse phase conditions. Similar to unbonded silica, Diol can extract polar compounds from non-polar solvents under normal phase conditions.Under reverse phase conditions,it can extract non-polar substances from samples.

【Ordering Information】

Part Number	Product Description
WE60SI-001	Diol SPE, 500mg/3mL,50/PK
WE60SI-002	Diol SPE, 500mg/6mL,30/PK
WE60SI-003	Diol SPE, 100mg/1mL,100/PK
WE60SI-004	Diol SPE, 200mg/3mL,50/PK
WE60SI-005	Diol SPE, 250mg/3mL,50/PK
WE60SI-006	Diol SPE, 250mg/6mL,30/PK
WE60SI-007	Diol SPE, 1g/6mL,30/PK
WE60SI-008	Diol SPE, 1g/12mL,20/PK
WE60SI-009	Diol SPE, 2000mg/12mL,20/PK

Upulite® inorganic adsorbents

Upulite® inorganic sorbents include SiZ, Florisil, neutral/Acid/basic alumina, CARB, and activated carbon.

SiZ

The inorganic-inorganic hybrid SiZ microspheres have a large surface area. Due to the high density modification of the functional groups specifically for phospholipids on the inorganic skeleton,the sorbent has ability to adsorb phospholipids. The phospholipids can be selectively adsorbed from the sample matrix efficiently, while other small molecular compounds are not adsorbed, so the sample can be purified without affecting the target recovery.

【Siz Performance characteristics 】

- ✓ Removal of lipids effectively, theoretically removal of 100% phospholipids
- ✓ Simple process, improve work efficiency
- ✓ High recovery, removing matrix interference without affect target compounds

【Ordering Information】

Part Number	Product Description
WE50Z-001	SiZ SPE 40mg/1mL，100/PK
WE50Z-002	SiZ SPE 60mg/3mL，50/PK
WE50Z-003	SiZ SPE 300mg/1mL，50/PK
WE50Z-004	SiZ SPE 600mg/6mL，30/PK
WE50QE-015	Que Tube, HMR-P，15 mL, 50/PK

Florisil

Florisil consists of SiO_2, MgO, and Na_2SO_4, It is a kind of porous sorbent with strong polarity and high activity, which can adsorb low polarity and medium polarity compounds.

【Ordering Information】

Part Number	Product Description
WE60FA-001	Florisil SPE, 100mg/1mL,100/PK
WE60FA-002	Florisil SPE, 200mg/3mL,50/PK
WE60FA-003	Florisil SPE, 500mg/3mL,50/PK
WE60FA-004	Florisil SPE, 500mg/6mL,30/PK
WE60FA-005	Florisil SPE, 1g/6mL,30/PK
WE60FA-006	Florisil SPE, 2g/12mL,20/PK
WE60FA-007	Florisil SPE, 5g/20mL,20/PK
WE60FA-008	Florisil SPE, 250mg/3mL,50/PK
WE60FA-009	Florisil SPE, 1g/12mL,20/PK
WE60FA-010	Florisil-PR SPE, 1g/ 6mL,30/PK

Diatomite

The porous of diatomite makes it have a strong adsorption capacity and a high carrying capacity for water,diatomite is suitable for the extraction and seperation of plasma,urine and water samples.

【Ordering Information】

Part Number	Product Description
WE60FB-001	SLE-B SPE,5g/20mL,20/PK
WE60FB-002	SLE-B SPE,4g/12mL,20/PK
WE60FB-003	SLE-B SPE,2g/6mL,30/PK
WE60FB-004	SLE SPE,20mLmaxsampleloadingvolume,100/PK
WE60FB-005	SLE SPE,1g/12mL,20/PK
WE60FB-006	SLE SPE,500mg/3mL,50/PK
WE60FB-007	SLE SPE,1g/6mL,30/PK
WE60FB-008	SLE SPE,5mLmaxsampleloadingvolume,100/PK
WE60FB-009	SLE SPE,1.5g/50mL,10/PK
WE60FB-010	SLE SPE,200mg/3mL,PH=9,50/PK
WE60FB-011	SLE SPE,200mg/3mL,PH=7,50/PK

Neutral Alumina

Neutral alumina sorbent generally used under normal phase conditions. The alumina is neutral after treatment, and retains electron-rich compounds such as heterocyclic substances aromatic hydrocarbons and organic amines containing nitrogen, phosphorus and sulfur groups.

【Ordering Information】

Part Number	Product Description
WE60AA-001	AL-N SPE,100mg/1mL,100/PK
WE60AA-002	AL-N SPE,200mg/3mL,50/PK
WE60AA-003	AL-N SPE,250mg/3mL,50/PK
WE60AA-004	AL-N SPE,500mg/3mL,50/PK
WE60AA-005	AL-N SPE,500mg/6mL,30/PK
WE60AA-006	AL-N SPE,1g/6mL,30/PK
WE60AA-007	AL-N SPE,2g/12mL,20/PK
WE60AA-008	AL-N SPE,5g/20mL,20/PK
WE60AA-009	AL-N SPE,22g/60mL,10/PK
WE60AA-010	AL-N SPE,1g/3mL,50/PK
WE60AA-011	AL-N SPE,3g/6mL,30/PK
WE60AA-012	AL-N SPE,2g/6mL,30/PK
WE60AA-013	AL-N SPE,1g/12mL,20/PK

Acid Alumina

Acid alumina sorbent has an acidic surface(pH 4.0),which can be used as a strong polar sorbent and a medium anion exchange sorbent.

【Ordering Information】

Part Number	Product Description
WE60AB-001	AL-A SPE,100mg/1mL,100/PK
WE60AB-002	AL-A SPE,500mg/3mL,50/PK
WE60AB-003	AL-A SPE,500mg/6mL,30/PK
WE60AB-004	AL-A SPE,1g/6mL,30/PK
WE60AB-005	AL-A SPE,2g/12mL,20/PK
WE60AB-006	AL-A SPE,5g/20mL,20/PK
WE60AB-007	AL-A SPE,1g/12mL,20/PK
WE60AB-008	AL-A SPE,60mg/3mL,50/PK
WE60AB-009	AL-A SPE,1g/3mL,50/PK

Basic Alumina

Basic Alumina sorbent obtainedby treating alumina with basic solution(pH 9.5).Basic Alumina have cation exchange function with negatively charged surface , and can be used for removing organic acids, phenols and so on.

【Ordering Information】

Part Number	Product Description
WE60AC-001	AL-B SPE,100mg/1mL,100/PK
WE60AC-002	AL-B SPE,500mg/3mL,50/PK
WE60AC-003	AL-B SPE,500mg/6mL,30/PK
WE60AC-004	AL-B SPE,1g/6mL,30/PK
WE60AC-005	AL-B SPE,2g/12mL,20/PK
WE60AC-006	AL-B SPE,5g/20mL,20/PK
WE60AC-007	AL-B SPE,2g/6mL,30/PK
WE60AC-008	AL-B SPE,8g/20mL,20/PK
WE60AC-009	AL-B SPE,200mg/3mL,50/PK
WE60AC-010	AL-B SPE,1g/12mL,20/PK

Graphitized Carbon Black

CARB (graphitized carbon black) is composed of non-porous sheet molecules with an aromatic positive six-membered ring structure, can retain both non-polar compounds (such as organochlorine pesticides) and strongly polar compounds (such as surfactants). CARB can adsorb and remove pigments from vegetables, fruits and other foods, and does not retain pesticides (except planar structure compounds). Carb used for pesticide residue analysis of vegetable，fruit and other agricultural products.

【Ordering Information】

Part Number	Product Description
WE60CA-001	CARB SPE,100mg/1mL,100/PK
WE60CA-002	CARB SPE,100mg/3mL,50/PK
WE60CA-003	CARB SPE,200mg/6mL,30/PK
WE60CA-004	CARB SPE,250mg/6mL,30/PK
WE60CA-005	CARB SPE,500mg/3mL,50/PK
WE60CA-006	CARB SPE,500mg/6mL,30/PK
WE60CA-007	CARB SPE,1g/6mL,30/PK
WE60CA-008	CARB SPE,2g/12mL,20/PK
WE60CA-009	CARB SPE,250mg/3mL,50/PK
WE60CA-010	CARB SPE,200mg/3mL,50/PK
WE60CA-011	CARB SPE,300mg/3mL,50/PK
WE60CA-012	CARB SPE,1g/12mL,20/PK

Activated Carbon

Activated carbon contains a large number of micropores, large specific surface area, large adsorption capacity, can be used for the analysis of nitrosamines and acrylamide in water.

【Ordering Information】

Part Number	Product Description
WE60CB-058	AC SPE,250mg/3mL,50/PK
WE60CB-059	AC SPE,500mg/6mL,30/PK
WE60CB-060	AC SPE,1g/6mL,30/PK
WE60CB-061	AC SPE,2g/12mL,20/PK
WE60CB-074	AC SPE,500mg/3mL,50/PK

Upulite® mixed-mode SPE Columns

Upulite® mixed-mode SPE is made of two kind sorbents . When the sample matrix is complex and diverse, such as pesticide residues in vagetable and fruit, where there are many types of residues and interferences that are not easy to be removed. CARB/PSA and CARB/NH_2 are mixed-mode SPE.

CARB/PSA

CARB/PSA is a double-layer SPE, which is made of equal amount GCB and PSA. The upper layer of GCB can adsorb the pigments in the matrix, and the lower layer of PSA can adsorb the organic acids, fatty acids, pigments,and other interferences in the sample. CARB/PSA is suitable for the analysis all kinds of pesticide residues in food.

【Ordering Information】

Part Number	Product Description
WE60TA-001	CARB/PSA SPE,250mg/250mg,6mL,30/PK
WE60TA-002	CARB/PSA SPE,500mg/500mg,6mL,30/PK
WE60TA-003	CARB/PSA SPE,500mg/500mg,20mL,20/PK
WE60TA-004	CARB/PSA SPE,250mg/250mg,3mL,50/PK
WE60TA-005	CARB/PSA SPE,150mg/150mg,3mL,50/PK
WE60TA-006	CARB/PSA SPE,150mg/150mg,6mL,30/PK

CARB/NH_2

CARB/NH_2 is made of equal amount GCB and NH_2 . The mixed-mode sorbent combines the advantages of the two, which can remove the interference of pigments, sterols and fatty acids in food and is suitable for the analysis all kinds of pesticide residues.

【Ordering Information】

Part Number	Product Description
WE60TB-001	CARB/NH_2 SPE,100mg/100mg,1mL,100/PK
WE60TB-002	CARB/NH_2 SPE,200mg/200mg,3mL,50/PK
WE60TB-003	CARB/NH_2 SPE,250mg/250mg,6mL,30/PK
WE60TB-004	CARB/NH_2 SPE,500mg/500mg,6mL,30/PK
WE60TB-005	CARB/NH_2 SPE,1g/1g,6mL,30/PK
WE60TB-006	CARB/NH_2 SPE,2g/2g,12mL,20/PK
WE60TB-007	CARB/NH_2 SPE,500mg/500mg,12mL,20/PK
WE60TB-008	CARB/NH_2 SPE,250mg/250mg,3mL,50/PK
WE60TB-009	CARB/NH_2 SPE,150mg/150mg,3mL,50/PK
WE60TB-010	CARB/NH_2 SPE,150mg/150mg,6mL,30/PK

Upulite® Special SPE Series

The Specialty SPE consists of two parts, one is the SPE with glass tube and the other is the sorbent with a specialized function.

The glass SPE is mainly used for the determination of plasticizers and bisphenol A in food and environmental samples. The glass tubes are free from plasticizers interference ,helpful for sample purification and enrichment and improves analytical sensitivity.

WePure Upulite®SPE sorbents include benzo(a)pyrene, plasticizers, sultanas, etc. to meet the needs of samples with different matrices.

【Glass SPE Ordering Information】

Part Number	Product Description
WE60TC-001	HLB Glass SPE，200mg，6mL，30/PK
WE60TC-002	HLB Glass SPE，500mg，6mL，30/PK
WE60TC-003	C18 Glass SPE，500mg/6mL，30/PK
WE60TC-004	C18 Glass SPE，1g/6mL，30/PK
WE60TC-005	Silica Glass SPE，500mg/6mL，30/PK
WE60TC-006	Silica Glass SPE，1g/6mL，30/PK
WE60TC-007	Silica Glass SPE，2g/6mL，30/PK
WE60TC-008	PSA Glass SPE，500mg/6mL，30/PK
WE60TC-009	PSA Glass SPE，1g/6mL，30/PK
WE60TC-010	AL-N Glass SPE，1g/6mL，30/PK
WE60TC-011	AL-B Glass SPE，1g/6mL，30/PK
WE60TC-012	CARB Glass SPE，500mg/6mL，30/PK
WE60TC-013	Florisil Glass SPE，500mg/6mL，30/PK
WE60TC-014	Florisil Glass SPE，1g/6mL，30/PK
WE60TC-015	SI/PSA Glass SPE，500mg/500mg，6mL，30/PK
WE60TC-016	PSA/Si Glass SPE，500mg/500mg，6mL，30/PK

【Special SPE ordering information】

Part Number	Specifications	Product Description
WE60SP-001	Special SPE for pesticide residue in tea	Upulite® TPT SPE，1g，6mL，30/PK
WE60SP-002	Special SPE for pesticide residue in tea	Upulite® TPT SPE，2g，12mL，20/PK
WE60SP-003	Special SPE for BaP in vegetable oil	Upulite® BaP SPE，22g，60mL，10/PK
WE60SP-004	Glass Special SPE for plasticizer in oils	Upulite® SI/PSA SPE，500mg/500mg，6mL，30/PK
WE60SP-005	Glass HLB for BPA	Upulite® HLB GLASS SPE，200mg，6mL，30/PK
WE60SP-006	Special SPE for Sudan Red	Upulite® SDR SPE，500mg，6mL，30/PK
WE60SP-007	Special SPE for Sudan Red	Upulite® SDR SPE，1g，12mL，30/PK
WE60SP-008	Special SPE for Plant Growth Hormone	Upulite® MCS SPE，500mg，6mL，30/PK
WE60SP-009	Special SPE for Oligosaccharides in honey	Upulite® HONEY SPE，12mL，20/PK
WE60SP-010	Special SPE for Oligosaccharides in honey	Upulite® HONEY SPE，900mg，6mL，30/PK
WE60SP-011	Special SPE for vitamin D2 and D3	Upulite® VDSPE，2g，12mL，20/PK
WE60SP-012	Special SPE for pesticide residues in traditional Chinese medicine	Upulite® TCMP SPE，1.5g，12mL，20/PK
WE60SP-013	Special SPE for resveratrol in wine	Upulite® PWR SPE，6mL30/PK

Part Number	Specifications	Product Description
WE60SP-014	BaP molecularly imprinted SPE	Upulite® MIP-BAP SPE，500mg/6mL，30/pk
WE60SP-015	BaP molecularly imprinted SPE	Upulite® MIP-BAP SPE，1g，6mL，30/PK
WE60SP-016	Special SPE for pesticide residue in oil	Upulite® DPS SPE，3g，12mL，20/PK
WE60SP-017	Special SPE for pesticide and veterinary drug residues in dairy products	Upulite® PVR SPE，3g，12mL，20/PK
WE60SP-018	C18 pre-treatment SPE	Upulite® ION-C18 SPE，1mL，50/PK
WE60SP-019	C18 pre-treatment SPE	Upulite® ION-C18 SPE，2.5mL，50/PK
WE60SP-020	Special SPE for total Aflatoxin	Upulite® AFT SPE For Grain Aflatoxin，12mL，20/PK
WE60SP-021	Special SPE for pyrethroids in traditional Chinese medicine	Upulite® Pyrethroids SPE，80mL，10/PK
WE60SP-022	Special SPE for veterinary drug residues	Upulite® Multi residue DPC-II SPE，12mL，20/PK
WE60SP-023	Special SPE for Glyphosate	Upulite® GLYSPE，6mL，30/PK
WE60SP-024	Special SPE for Polycyclic aromatic hydrocarbon	Upulite® DVBSPE，300mg，6mL，30/PK
WE60SP-025	Special SPE for Mixed ion silica	Upulite® Mixed C/A for CAT SPE，200mg，3mL，50/PK
WE60SP-026	Special SPE for basic silica	Upulite® Alkaline Silica SPE，500mg，6mL，30/PK

Immunoaffinity columns

Immunoaffinity columns utilize the principle of specific reaction between antigen and antibody,the antibody is suspended in a gel through covalent bonding, and specifically adsorbs the fungaltoxins in the sample. When the sample extract passes through the immunoaffinity column, the fungaltoxin is captured by the antibody and combind with antibody, while other compounds pass through the column, finally the target toxin is eluted to achieve the purpose of separating the toxin from grain cereals, feed and other matrix.

【Performance characteristics of immunoaffinity columns】

- ✓ Suitable for all kinds of fungaltoxins such as aflatoxin B1, aflatoxin M1，deoxynivalenol，zearalenone, ochratoxin and so on
- ✓ Antibodies with high specificity and affinity
- ✓ High capacity , high antibody content, high purification efficiency
- ✓ The process is simple, easy to use
- ✓ Conforms to standard methods

【Ordering Information】

Part Number	Product Description
WE60MA-001	Aflatoxin B1 immunoaffinity column, 300ng/3mL; 25/pk
WE60MA-002	Total Aflatoxin immunoaffinity column, 300ng/3mL; 25/pk
WE60MA-003	Aflatoxin M1 immunoaffinity column, 100ng/3mL; 25/pk
WE60MA-004	Aflatoxin B1, B2, G1, G2, M1, M2 immunoaffinity column, 300ng/3mL; 25/pk
WE60MA-005	Zearalenone immunoaffinity column,2000ng/3mL;25/pk
WE60MA-006	Deoxynivalenol immunoaffinity column, 2000ng/3mL; 25/pk
WE60MA-007	Ochratoxin immunoaffinity column,150ng/3mL;25/pk
WE60MA-008	T-2 toxin immunoaffinity column, 100ng/3mL;25/pk
WE60MA-009	Fumonisin immunoaffinity column,100ng/3mL;25/pk
WE60MA-010	Heparin immunoaffinity column, 2000mg/3mL; 25/pk
WE60MA-011	VB12 immunoaffinity column,1000ng/3mL;25/pk

QuEChERS

QuEChERS is a sample pretreatment method that emerged in recent years and is rapidly promoted and applied. Just as its name, QuEChERS is a combination of the following words:Quick, Easy, Cheap, Effective, Rugged, Safe. The principle of QuEChERS is similar to HPLC and SPE,the sorbent can adsorb the impurities in the sample matrix and achieve the purpose of removal impurity and purification. It was designed as a rapid pretreatment technique for analysising pesticide residues in plant-origin agricultural products ,such as fruits and vegetables. Actually QuEChERS has gradually been used in more and more fields, such as veterinary drug residues, PAH, antibiotics and so on. The sample matrix for analysis has also been expanded to animal-origin foods, soil, plasma, etc, QuEChERS has become an important method for sample pretreatment analysis.

【QuEChERS Performance characteristics】

- ✓ Simple process, good recovery of most pesticides
- ✓ Efficient and fast, improve work efficiency
- ✓ Reduce the use of organic solvents, more friendly to the environment
- ✓ Favorable for cost control

There are three standard QuEChERS method: the original method, the USDA general standard method AOAC 2007, the EU standard method EN15662, in addition to many other improved methods.The QuEChERS method can be simply divided into two major steps: extraction and purification, the steps are as follow.

Sample homogenize and weigh

Add organic solvent (e.g. acetonitrile)， shake to extract

Add extraction salt， shake vigorously for 1min.

Centrifuge, collect the supernatant

Add the supernatant into the Cleapup tube， shake for 1min.

Centrifuge for 5min, collect the supernatant for analysis.

【Ordering Information】

Extraction salt kit (salt pack + 50ml centrifuge tube)

Part Number	Product Description	Notes
WE50QA-001	Que Extraction Salt Tube, 6g $MgSO_4$, 1.5 g NaOAc, 50ml, 50/PK	AOAC2007/GB 23200113-2018
WE50QA-002	Que Extraction Salt Tube, 4g $MgSO_4$, 1g NaCl, 1 g TSCD, 0.5 g DHS, 50ml, 50/PK	CEN 15662
WE50QA-003	Que Extraction Salt Tube, 2 g $MgSO_4$, 1g NaOAc, 50ml, 50/PK	/
WE50QA-004	Que Extraction Salt Tube, 5g $MgSO_4$, 50mL, 50/PK	/
WE50QA-005	Que Extraction Salt Tube, 4g $MgSO_4$, 1g NaOAc, 50mL, 50/PK	Original method

【Ordering Information】

Extraction salt kit (without centrifuge tube)

Part Number	Product Description	Notes
WE50QB-001	Que Extraction Salt, 6 g $MgSO_4$, 1.5g NaOAc, 50/PK	AOAC 2007
WE50QB-002	Que Extraction Salt, 4g $MgSO_4$, 1g NaCl, 1 g TSCD, 0.5g DHS, 50/PK	EN 15662
WE50QB-003	Que Extraction Salt, 4g Na_2SO_4, 1g NaCl, 50/PK	/
WE50QB-004	Que Extraction Salt, 4g $MgSO_4$, 1g NaOAc, 50/PK	/
WE50QB-005	Que Extraction Salt, 1g NaCl, 0.3g NaOAc, 50/PK	/
WE50QB-006	Que Extraction Salt, 100mg NaOAc, 100mg $MgSO_4$, 50/PK	/
WE50QB-007	Que Extraction Salt, 5g Na_2SO_4, 50/PK	/
WE50QB-010	Que Extraction Salt, 2g Na_2SO_4, 0.5g NaOAc, 50/PK	Original method
WE50QB-011	Que Extraction Salt, 4g $MgSO_4$, 1g NaCl, for 10g Sample, 50/PK	/
WE50QB-012	Que Extraction Salt, 6g $MgSO_4$, 50/PK	/
WE50QB-013	Que Extraction Salt, 1.5g NaOAc, 50/PK	/

【Ordering Information】

Cleanup Tube（2mL)

Part Number	Product Description	Notes
WE50QC-001	Que Tube, 100mg PSA, 100mg C18, 2mL, 100/PK	GB23200.121 Vegetables, Fruits, Mushrooms, and Sugars
WE50QC-002	Que Tube, 50mg PSA, 50mg C18, 20mg Carb, 2mL, 100/PK	GB23200.121 Vegetables, Fruits, Mushrooms, and Sugars
WE50QC-003	Que Tube, 50mg PSA, 50mg C18, 25 mg Carb, 150mg MgSO4, 2ml, 100/PK	GB23200.121grains, Oils and Nuts; GB23200.39
WE50QC-004	Que Tube, 100 mg PSA, 40mg C18, 20mg Carb, 2mL, 100/PK	GB23200.121 Tea and Spices (Seasoning)
WE50QC-005	Que Tube, 50mg C18, 150mg MgSO4, 2mL, 100/PK	AOAC 2007, Drug Residues in Meat
WE50QC-006	Que Tube, 50mg PSA, 100mg C18, 50mg Silica, 100mg MgSO4, 2mL, 100/PK	/
WE50QC-007	Que Tube, AOAC-25mg PSA, 25mg C18, 7mg Carb, 150mg MgSO4，2mL, 100/PK	/
WE50QC-008	Que Tube, AOAC-50mg PSA, 30mg C18, 30mg AL-N, 150mg MgSO4, 2mL, 100/PK	CEN 15662，General fruits and vegetables
WE50QC-009	Que Tube, 50mg PSA, 100mg C18, 100mg MgSO4, 2mL, 100/PK	CEN 15662，Fruits and vegetables containing fat and wax
WE50QC-010	Que Tube, For Ribavirin, 2mL, 100/PK	CEN 15662，Colored fruits and vegetables
WE50QC-011	Que Tube, 25mg C18, 75mg MgSO4, 2mL, 100/PK	CEN 15662，High Color Fruits and Vegetables
WE50QC-012	Que Tube, 50mg PSA, 25mg C18, 10mg Carb,150 mg MgSO4, 2mL, 100/PK	/
WE50QC-013	Que Tube, Special for Veterinary drug residues 2mL, 100/PK	/
WE50QC-014	Que Tube, 50mg $MgSO_4$, 2mL, 100/PK	/
WE50QC-015	Que Tube, 50mg PSA, 200mg $MgSO_4$, 2mL, 100/PK	
WE50QC-016	Que Tube, 50mg PSA，150mg $MgSO_4$，10mg Carb, 2mL, 100/PK	/
WE50QC-017	Que Tube, 50mg PSA，150mg MgSO4，50mg C18，10mg Carb, 2mL, 100/PK	/
WE50QC-018	Que Tube, 100mg PSA, 100mg C18, 150mg MgSO4, 2mL, 100/PK	/
WE50QC-019	Que Tube, 100mg PSA, 100mg C18, 150mg MgSO4, 2mL, 100/PK	/
WE50QC-020	Que Tube, 50mg PSA, 50mg C18, 100mg MgSO4, 2mL, 100/PK	Determination of Papaverine, Morphine, Nicotine, Codeine, and thebaine in Hotpot Food
WE50QC-021	Que Tube, For Ribavirin, 2mL, 100/PK	/
WE50QC-022	Que Tube, 25mg C18, 75mg MgSO4, 2mL, 100/PK	/

Part Number	Product Description	Notes
WE50QC-023	Que Tube, 50mg PSA, 25mg C18, 10mg Carb,150mg $MgSO_4$, 2mL, 100/PK	/
WE50QC-024	Que Tube, Special for Veterinary drug residues 2mL, 100/PK	/
WE50QC-025	Que Tube, 50mg $MgSO_4$, 2mL, 100/PK	/
WE50QC-026	Que Tube, 50mg PSA, 200mg $MgSO_4$, 2mL, 100/PK	/
WE50QC-027	Que Tube, 50mg PSA，150mg $MgSO_4$，10mg Carb, 2mL, 100/PK	/
WE50QC-028	Que Tube, 50mg PSA，150mg $MgSO_4$， 50mg C18，10mg Carb, 2mL, 100/PK	Universal type
WE50QC-029	Que Tube, 100mg PSA, 100mg C18, 150mg $MgSO_4$, 2mL, 100/PK	/
WE50QC-030	Que Tube, 100mg PSA, 100mg C18, 150mg $MgSO_4$, 2mL, 100/PK	/
WE50QC-031	Que Tube, 50mg PSA, 50mg C18, 100mg $MgSO_4$, 2mL, 100/PK	/

【Ordering Information】

Cleanup Tube（15mL)

Part Number	Product Description	Notes
WE50QD-001	Que Tube,AOAC-400mg PSA, 1200mg $MgSO_4$,15mL,50/PK	AOAC 2007：General Fruits and Vegetables
WE50QD-002	Que Tube,AOAC-400mg PSA,400mg C18, 1200mg $MgSO_4$,15mL,50/PK	AOAC 2007：Fruits and vegetables containing fat and wax
WE50QD-003	Que Tube,AOAC-400mg PSA,400mg Carb, 1200mg $MgSO_4$,15mL,50/PK	AOAC 2007：Colored Fruits and Vegetables
WE50QD-004	Que Tube,AOAC-400mg PSA,400mg C18, 400mg Carb,1200mg $MgSO_4$,15mL,50/PK	AOAC 2007：Fruits and Vegetables with Pigments and Fats
WE50QD-005	Que Tube,AOAC-150mg C18,900mg $MgSO_4$, 15mL,50/PK	AOAC 2007：Biological samples containing phospholipids and proteins
WE50QD-006	Que Tube,AOAC-400mg PSA,400mg C18, 45mg Carb,1200mg $MgSO_4$,15mL,50/PK	AOAC 2007：Fruits and vegetables containing light pigments and fats
WE50QD-007	Que Tube,AOAC-300mg PSA,300mg C18, 900mg $MgSO_4$,15mL,50/PK	AOAC 2007：Fruits and vegetables containing fats and waxy substances
WE50QD-008	Que Tube,AOAC-450mg PSA,300mg C18, 50mg Carb,900mg $MgSO_4$,15mL,50/PK	AOAC 2007：Fruits and vegetables containing light pigments and fats
WE50QD-009	Que Tube,AOAC-300mg PSA,900mg $MgSO_4$, 15mL,50/PK	AOAC 2007：General Fruits and Vegetables
WE50QD-010	Que Tube,EN-150mg PSA,900mg $MgSO_4$, 15mL,50/PK	CEN 15662, General fruits and vegetables
WE50QD-011	Que Tube,EN-150mg PSA,150mg C18, 900mg $MgSO_4$,15mL,50/PK	CEN 15662：Fruits and vegetables containing fats and waxes
WE50QD-012	Que Tube,EN-150mg PSA,15mg Carb, 900mg $MgSO_4$,15mL,50/PK	CEN 15662：Fruits and vegetables containing pigments

【Ordering Information】
Cleanup Tube（15mL)

货号	规格	备注
WE50QD-013	Que Tube,EN-150mg PSA,45mg Carb,900mg $MgSO_4$, 15mL,50/PK	CEN 15662：High Color Fruits and Vegetables
WE50QD-014	Que Tube,50mg PSA,150mg C18,900mg Na_2SO_4,15ml,50/PK	Veterinary medicine
WE50QD-015	Que Tube,300mg PSA,300mg C18,90mg Carb,900mg $MgSO_4$, 300mg Silica,15mL,50/PK	Pharmacopoeia of the People's Republic of China，Chinese herbal pesticide residues
WE50QD-016	Que Tube,200mg PSA,200mg C18,200mg Carb,600mg $MgSO_4$, 15mL,50/PK	/
WE50QD-017	Que Tube,100mg PSA,50mg C18,20mg Carb,400mg $MgSO_4$, 15mL,50/PK	SN/T 3235-2012 Pig liver and animal tissue samples
WE50QD-018	Que Tube,300mg PSA,300mg C18,45mg Carb,900mg $MgSO_4$, 15mL,50/PK	/
WE50QD-019	Que Tube,100mg PSA,200mg C18,2mg Carb,2000mg $MgSO_4$, 15mL,50/PK	/
WE50QD-020	Que Tube,100mg PSA,40mg C18,600mg $MgSO_4$,15mL,50/PK	SN/T 3235-2012 Milk and aquatic product samples
WE50QD-021	Que Tube,400mg PSA,250mg $NaSO_4$,15mL,50/PK	/
WE50QD-022	Que Tube,400mg PSA,200mg C18,400mg Na_2SO_4,15mL,50/PK	/
WE50QD-023	Que Tube,300mg PSA,100mg C18,1200mg $MgSO_4$,15mL,50/PK	/
WE50QD-024	Que Tube,150mg PSA,250mg C18,600mg Na_2SO_4,15mL,50/PK	/
WE50QD-025	Que Tube,400mg PSA,400mg C18,200mg Carb, 1200mg MgSO4,15ml,50/PK	GB 23200.113-2018 Tea and spices
WE50QD-026	Que Tube,150mg HLB-P,15mL,50/PK	/
WE50QD-028	Que Tube,50mg PSA,150mg C18,25mg Carb,900mg MgSO4, 15ml,50/PK	/
WE50QD-029	Que Tube,100mg C18,300mg $MgSO_4$,15mL,50/PK	/
WE50QD-030	Que Tube,AOAC-250mg PSA,150mg C18,150mg AL-N, 750mg MgSO4,15mL,50/PK	/
WE50QD-031	Que Tube,150mg PSA,15mg Carb,885mg MgSO4， 15mL,50/PK	Darker colored vegetables, fruits and edibles
WE50QD-032	Que Tube,150mg PSA,100mg Carb,900mg $MgSO_4$,15mL,50/PK	/
WE50QD-033	Que Tube,300mg PSA,300mg C18,150mg Carb, 900mg MgSO4,15mL,50/PK	/
WE50QD-034	Que Tube,300mg PSA,300mg C18,1200mg $MgSO_4$,15mL,50/PK	/
WE50QD-035	Que Tube,2gMg SO4,15mL,50/PK	/
WE50QD-036	Que Tube,250mg C18,15mL,50/PK	/
WE50QD-037	Que Tube,300mg PSA,200mg C18,50mg Carb,130mg Silica， 850mg $MgSO_4$,15mL,50/PK	/

货号	规格	备注
WE50QD-038	Que Tube,30mg PSA,900mg MgSO4,15mL,50/PK	/
WE50QD-039	Que Tube,30mg PSA,15mg Carb,885mg MgSO4,15mL,50/PK	/
WE50QD-040	Que Tube,80mg PSA,400mg C18,1200mg MgSO4,15mL,50/PK	/
WE50QD-041	Que Tube,40mg PSA,400mg C18,1200mg MgSO4,15mL,50/PK	/
WE50QD-042	Que Tube,400mg PSA,150mg C18,400mg MgSO4,15mL,50/PK	/
WE50QD-043	Que Tube,25mg PSA,500mg C18,150mg MgSO4,15mL,50/PK	/
WE50QD-044	Que Tube,900mg MgSO4，150mg PSA，150mg C18，50mg Carb,15mL,50/PK	/
WE50QD-045	Que Tube,900mg MgSO4，150mg PSA，150mg C18，200mg Carb，15mL,50/PK	/
WE50QD-046	Que Tube,250mgC18,2000mgNa2SO4,15mL,50/PK	/
WE50QD-047	Que Tube,375mg PSA,250mg C18,45mg Carb,750mg MgSO4, 15mL,50/PK	/
WE50QD-048	Que Tube,150mg PSA,45mg Carb,855mg MgSO4,15mL,50/PK	/
WE50QD-049	Que Tube,125mg PSA,35mg Carb,750mg MgSO4,15mL,50/PK	/
WE50QD-050	Que Tube,250mg PSA,35mg Carb,750mg MgSO4, 250mg C18,15mL,50/PK	/
WE50QD-051	Que Tube,5mg PSA,150mg MgSO4,50mg C18, 25mg Carb,15mL,50/PK	/
WE50QD-052	Que Tube,10mg PSA,150mg MgSO4,50mg C18, 25mg Carb,15mL,50/PK	/
WE50QD-053	Que Tube,400mg PSA,200mg Carb,1200mg MgSO4, 15mL,50/PK	/
WE50QD-054	Que Tube,75mg PSA,450mg MgSO4,15mL,50/PK	/
WE50QD-055	Que Tube,1500mg Na2SO4,500mg PSA,250mg C18, 15mL,50/PK	/
WE50QD-056	Que Tube,3000mg Na2SO4,50mg PSA,15mL,50/PK	/
WE50QD-057	Que Tube,3000mg Na2SO4,50mg PSA,250mg C18,15mL,50/PK	/
WE50QD-058	Que Tube,3000mg Na2SO4,50mg PSA,250mg C18,10mg Carb, 15mL,50/PK	/
WE50QD-059	Que Tube,3000mg Na2SO4,50mg PSA,250mg C18,50mg Carb, 15mL,50/PK	/
WE50QD-060	Que Tube,3000mg Na2SO4,50mg PSA,250mg C18, 100mg Carb,15mL,50/PK	/
WE50QD-061	Que Tube,100mg PSA,40mg C18,20mg Carb,600mg MgSO4, 15mL,50/PK	/
WE50QD-062	Que Tube,100mg PSA,50mg C18,50mg Carb,400mg MgSO4, 15mL,50/PK	/
WE50QD-063	Que Tube,400mg PSA,250mg C18,250mg Na2SO4,15mL,50/PK	/

【Ordering Information】

Cleanup Tube（15mL）

Part Number	Product Description	Notes
WE50QE-001	Que Tube,For Quinolone,2mL,100/PK	Quinolone detection specific
WE50QE-002	Que Tube,For Chloramphenicol,2mL,100/PK	Chloramphenicol detection specific
WE50QE-003	Que Tube,For Organochlorine,2mL,100/PK	Organic chlorine detection dedicated
WE50QE-004	Que Tube,For Malachite Green,2mL,100/PK	Malachite Green Testing Special
WE50QE-005	Que Tube,For Tetracyclines,2mL,100/PK	Special for tetracycline detection
WE50QE-006	Que Tube,For β-agonists,2mL,100/PK	β Dedicated for receptor agonist detection
WE50QE-007	Que Tube,For Sulfonamides,2mL,100/PK	Special for sulfonamide detection
WE50QE-008	Que Tube,For Pesticide,15mL,50/PK	Special for detecting multiple pesticide residues
WE50QE-009	Que Tube,For Residues of Veterinary Drug,15mL,50/PK	Special for veterinary drug residue detection
WE50QE-010	Que Tube,For oil pesticide,2mL,100/PK	Special for pesticide residue samples in oils and fats
WE50QE-011	Que Tube,For Furfural,2mL,100/PK	Que purification tube (dedicated to furfural)
WE50QE-012	Que Tube,For oil pesticide,15mL,50/PK	Special for pesticide residue samples in oils and fats
WE50QE-013	Que Tube,300mg MgSO4,50mg PSA,50/PK	GB23200-121
WE50QE-014	Que Tube,For Egg anti-coccidian residue detection,15mL,50/PK	Special for residual detection of anti coccidiosis drugs in poultry eggs
WE50QE-015	Que Tube,HMR-P,15mL,50/PK	/
WE50QE-016	Que Tube,For Coccidiostat,2mL,100/PK	Specialized anticoccidial drug

Question & Answer

1. Condition

reverse: methanol, acetonitrile, etc

Normal: non-polar organic solvents, n-hexane, etc

Ion exchange : methanol, acetonitrile, isopropanol and other polar solvents miscible with water

2. Flow rate

Condition/ Equilibration: drip down by gravity ,increase flow rate if necessary

Load: Liquid drip down by gravity or controll loading flow rate ⩽1mL/min

Elute: Flow rate control 1~2mL/min

Too fast flow rate may result in insufficient retention or incompletely elution , too slow flow rate result in low work efficiency. The sample contains small particles of impurities , solution viscosity is too high ,all these may reduce the flow rate,and can adjust according to the situation .

Possible Cause	Solution
Too fast	Use and turn down flow control
small particles in the sample solution	The samples solution should be filtered or centrifuged before loading on SPE, high-fat samples should be frozen for a period of time to achieve better centrifugation effect
High viscosity of sample solution	Dilute the sample solution

3.Low recovery

The result shows the recovery is low, after excluding other factors, the SPE sample pretreatment process can be checked by blank and sample recovery rate . Collect the loading effluent, washing eluent and eluent, test and analyse respectively. Make change by analyzing the target recovery of the effluent in each step, the problem is solved.

1、The target compound in the loading/washing effluent, and the target compound is not retained enough on the sorbent

Possible Cause	Solution
Wrong type	Select the stronger retention sorbent based on the structure, polarity and solubility of the target material
The organic phase in the sample solution is too high	Dilute the sample with water ， increase reverse retention
The flow rate is too fast when loading	Control flow rate，liquid drip down by gravity or controll loading flow rate ⩽1mL/min
Sample volume is too large or sample concentration is too high, "penetration" phenomenon	Reduce sample loading, select larger SPE with more sorbents
The washing solution is too strong	Reduce the strength of washing solution

2 The target compound is not fully eluted

Possible Cause	Solution
Retention too strong, no suitable eluent	Choose another SPE with slightly weaker retention
The eluent is not strong enoug	All these methods can improve elution efficiency,increase the proportion of organic solvents in elution solution, adjust the pH of elution solution, and use eluent with stronger elution capability
Insufficient elution volume	Increase elution volumn
Flow rate of elution is too fast	Turn down the flow rate

ISO 9001 Certificate of WePure Biotech

质量管理体系认证证书

证书编号：04922Q01827R0S

微纯生物科技（广州）有限公司

地址：广东省广州市南沙区珠江街南江二路6号自编9栋（7#楼）9层
统一社会信用代码：91440115MABRPFBGXT

根据贵组织的申请，本公司依据《质量管理体系 要求》（GB/T19001-2016/ISO9001:2015）规定实施认证审核，经评定符合要求，特此发证。质量管理体系覆盖范围为：

液相色谱填料、色谱柱的研发、生产和销售

首次发证日期：2022年12月20日
证书有效日期：2022年12月20日至2025年12月19日

第一次监审合格标识加贴处　第二次监审合格标识加贴处

中国认可 国际互认 管理体系 MANAGEMENT SYSTEM CNAS C049-M

广东质检中诚认证有限公司
地址：广东省广州市黄埔区科学城科学大道10号
电话：020-89232333　传真：020-89232078
网址：http://www.qtctc.org
证书查询

The Certificate Of Quality Management System

Certificate No. : 04922Q01827R0S

WePure Biotech (Guangzhou) Co., Ltd.

Address: 9/F, Building 9 (Building 7 #), No.6, Nanjiang 2nd Road, Zhujiang Street, Nansha District, Guangzhou City, Guangdong Province, P.R. China / Unified Social Credit Code: 91440115MABRPFBGXT

According to your organization's application, our company carried out audit and certification in accordance with the requirements for *Quality Management System* (GB/T19001-2016/ISO9001:2015), it accords with the requirements through assessment. The scope of the certified QMS is:

R&D, manufacture and sales of liquid chromatography packing and chromatographic column

Initial date: 2022-12-20
Term of validity of this certificate: 2022-12-20 to 2025-12-19

The scope of the certified should limits within the administrative licensing or China Compulsory Certification. The certified organization shall be subject to annual supervision of CTC during the validity period.The Certificate is only valid with the annual surveillance labels. The certificate related information can be obtained through the national certification and accreditation Information public service platform (http://cx.cnca.cn) or customer service hotline 400-888-2538.

The first surveillance　The second surveillance

中国认可 国际互认 管理体系 MANAGEMENT SYSTEM CNAS C049-M

Chairman

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