SEPLITE

Driving the innovation
SUNRESIN

RESINS FOR SOLID PHASE PEPTIDE SYNTHESIS

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SUNRESIN NEW MATERIALS CO.LTD.,XI' AN

COMPANY PROFILE

INTRODUCTION

Sunresin is an innovation oriented high-tech enterprise. It is specialized in R&D, manufacturing and sales of adsorption and separation polymer resins, equipments and customized solutions together with services. It is the largest special resin manufacturer with the most complete variety of production in China as well. Sunresin manufactures about 10,000 cubic meters ion exchange and adsorption resins annually, and supplies with tens of adsorption and separation equipments to the customers. Sunresin's special resins including about 20 series and 150 types which have been broadly used in industries such as Food Processing, Biotech, Pharmaceuticals, Herbal Extraction, Waste Water Treatment, Membrane Caustic Soda, Hydrometallurgy, and Industrial & Civil Water Treatment, etc.

Sunresin is dedicated to industrialization of newly developed polymeric resins, exploitation of applications in emerging industries. The core technologies for all special resin products and equipments are of its Independent Intellectual Property Rights. Sunresin has more than 30 China and international patents and has accomplished about ten national projects in the related fields. Sunresin is certified under ISO 9000 for Quality Control System and ISO14000 for Environment Control System. It has also been awarded with Certificates from WQA Golden Seal, Kosher, etc. Under worldwide recognized QC systems, Sunresin provides to market with excellent and stable quality resins and ensures the process controlled by strict environmental requirements.

Sunresin focuses on innovation, quality and service. Based on powerful technology strength, abundant experience and strict international standard, Sunresin keeps providing qualified products, cost-effective equipment, professional solution design and experienced technical support to customers. With the perspectiveness of resin industry, Sunresin takes the responsibility to lead and drive the resin industry towards innovation oriented, order competition and clean production.

Sunresin is working to be a world professional ion exchange and adsortption resin and solution provider.

R&D

Sunresin considers R&D and innovation as core values of company development.

We have established 5 teams in our government authorized R&D center. The center is equipped with advanced analytical instruments branded as Malvern, Mettler, PE, Agilent etc. Meanwhile the 5-team-staff consists around 40 creative and experienced chemists and engineers which aims at improving the existing products and developing specific new products for new applications. With our enormous data-base in resin design and one of the top lab facilities in the ion exchange industry, we are uniquely equipped with best tailored resin solutions according to customer requirements.

We are continuously investing in our technology and facilities to improve product efficiency and new applications to meet today's ever-rising demand for special resins.

SOLID SUPPORTS

1.Polystyrene resin

A basic resin serves as a starting material for preparation of a wide variety of resins for combinatorial chemistry and solid phase peptide synthesis.

Product No.	Cross-linking	Particle size (Mesh)	Swelling (ml/g)	FOB Price (USD/KG)
LXSS01-1-1201	1%	100-200	DCM: 6.5-8.0	350
	1%	200-400	DMF: 3.5-5.5	
LXSS01-2-1201	2%	100-200	DCM: 4.0-6.0	350
	2%	200-400	DMF: 3.0-5.0	

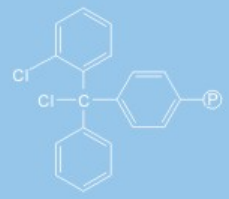
2.Chloromethyl resin (Merrifield resin)

The Merrifield resin has in the past been the standard support for the synthesis of peptide acids by Boc strategy. Originally, the cesium salt of a protected amino acid was anchored to the chloromethyl support via nucleophilic displacement of chlorine. Although, Me4N salts, sodium salts in THF with Bu4NF catalysis and more recently Zinc salts in EtOH have also been used. Cleavage can be effected by treatment of resin with HF or TFMSA, by hydrogenolysis, and by treatment with trimethyltin hydroxide. Alcohols can be released using reducing agents such as diisobutylaluminium hydride or LiBH4. Methyl esters can be produced by transesterification with methoxide. Alcohols can coupled to chloromethyl resin by heating together in DMF the resin and corresponding potassium or sodium alkoxide.

Product No.	Particle size (mesh)	Loading (mmol/g resin)	FOB Price (USD/KG)
LXSS02-1-1201	100-200 200-400	0.4-0.6	460
LXSS02-1-1202	100-200 200-400	0.6-0.8	460
LXSS02-1-1203	100-200 200-400	0.8-1.0	460
LXSS02-1-1204	100-200 200-400	1.0-1.2	460
LXSS02-1-1205	100-200 200-400	1.2-1.4	460
LXSS02-1-1206	100-200 200-400	1.4-1.6	460
LXSS02-1-1207	100-200 200-400	1.6-2.0	460
LXSS02-1-1208	100-200 200-400	2.0-2.4	500
LXSS02-1-1209	100-200 200-400	2.4-2.8	500
LXSS02-1-1210	100-200 200-400	2.8-3.4	500
LXSS02-1-1211	100-200 200-400	3.4-4.0	500

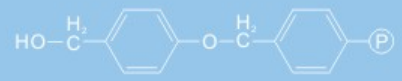
3. 2-Chorotrityl Chloride resin

An extremely acid-labile resin for preparing peptides and partially protected peptide fragments by the Fmoc strategy. This resin is ideal for use in the preparation of peptides containing C-terminal Cys, His, Met, Tyr and Pro residues. Cleavage for protected peptides from this matrix can be effected by treatment with AcOH/TFE/DCM,0.5% TFA or HFIP. Fully deprotected peptides can also be obtained by cleaving with 95% TFA in the usual manner.



Product No.	Particle size (mesh)	Loading（mmol/g resin)	FOB Price (USD/KG)
LXSS03-1-1201	100-200 200-400	0.4-0.6	1300
LXSS03-1-1202	100-200 200-400	0.6-0.8	1300
LXSS03-1-1203	100-200 200-400	0.8-1.0	1300
LXSS03-1-1204	100-200 200-400	1.0-1.2	1300
LXSS03-1-1205	100-200 200-400	1.2-1.4	1300
LXSS03-1-1206	100-200 200-400	1.4-1.6	1300

4.Wang resin
4-Benzyloxybenzy Alcohol resin

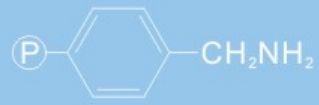


Wang resin is the most widely used resin for SPOS. As a standard support it can be used for the solid phase immobilization of acids and phenols for SPOS. The ester linkage may be achieved, which has good stability to a variety of reaction conditions, but can be readily removed with the moderate acid treatment, generally with TFA. For the immobilization of amines, Wang resin also can be readily converted into solid phase equivalents of standard urethane-based protecting groups by reaction with phosgene or activated carbonates, such as carbonyl diimidazole or bis(p-nitrophenyl)-carbonate.

Product No.	Particle size (mesh)	Loading (mmol/g resin)	FOB Price (USD/KG)
LXSS04-1-1201	100-200 200-400	0.4-0.6	700
LXSS04-1-1202	100-200 200-400	0.6-0.8	700
LXSS04-1-1203	100-200 200-400	0.8-1.0	700
LXSS04-1-1204	100-200 200-400	1.0-1.2	800
LXSS04-1-1205	100-200 200-400	1.2-1.4	800
LXSS04-1-1206	100-200 200-400	1.4-1.6	800
LXSS04-1-1207	100-200 200-400	1.6-2.0	800

5.Aminomethyl resin

The Aminomethyl resin is one of the most widely used functionalized supports for solid-phase synthesis. Many supports can be made by acylating this resin with carboxylic acid-containing linkers using standard methods of amide bond formation to furnish supports for SPOS. It is also used as a scavenger resin in solution phase synthesis to remove excess acids, alkylating agents and other electrophiles.

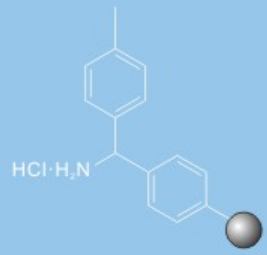


Product No.	Particle size (mesh)	Loading (mmol/g resin)	FOB Price (USD/KG)
LXSS05-1-1201	100-200 200-400	0.4-0.6	800
LXSS05-1-1202	100-200 200-400	0.6-0.8	800
LXSS05-1-1203	100-200 200-400	0.8-1.0	800
LXSS05-1-1204	100-200 200-400	1.0-1.2	800
LXSS05-1-1205	100-200 200-400	1.2-1.4	800
LXSS05-1-1206	100-200 200-400	1.4-1.6	800
LXSS05-1-1207	100-200 200-400	1.6-2.0	900
LXSS05-1-1208	100-200 200-400	2.0-2.4	900
LXSS05-1-1209	100-200 200-400	2.4-3.0	900

6.MBHA resin

4-methylbenzhydrylamine Hydrochloride Salt Resin (MBHA resin)

MBHA resin is used in the synthesis of peptide amide by Boc chemistry. This support is more acid sensitive than BHA resin, and thus allow release of the product to be effected with HF or TFMSA under less drastic conditions.

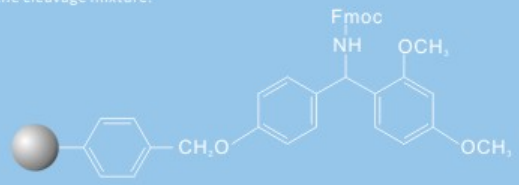


Product No.	Particle size (mesh)	Loading (mmol/g resin)	FOB Price (USD/KG)
LXSS06-1-1201	100-200 200-400	0.3-0.6	1500
LXSS06-1-1202	100-200 200-400	0.6-0.8	1500
LXSS06-1-1203	100-200 200-400	0.8-1.0	1500
LXSS06-1-1204	100-200 200-400	1.0-1.2	1600
LXSS06-1-1205	100-200 200-400	1.2-1.4	1600
LXSS06-1-1206	100-200 200-400	1.4-1.6	1600

7.Rink amide resin

4-(2', 4'-Dimethoxyphenyl-Fmoc-aminomethyl)-phenoxymethyl resin

Rink amide resin is an excellent support for the Fmoc SPPS of peptide amides. This resin is more acid sensitive than Rink Amide-AM and Rink Amide-MBHA resins. Cleavage with high concentrations of TFA can lead to the breakdown of the linker, with the concomitant formation of by-products that can not be removed by simple washes. These problems appear to be minimized through the use of low TFA concentrations or by the addition of trialkylsilanes to the cleavage mixture.

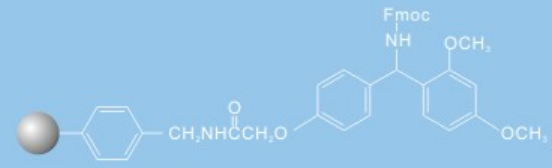


Product No.	Particle size (mesh)	Loading (mmol/g resin)	FOB Price (USD/KG)
LXSS07-1-1201	100-200 200-400	0.3-0.6	3300
LXSS07-1-1202	100-200 200-400	0.6-0.8	3300
LXSS07-1-1203	100-200 200-400	0.8-1.0	3500

8.Rink Amide-AM resin

4-(2',4'-Dimethoxyphenyl-Fmoc-aminomethyl)-phenoxyacetamido-AM resin

This resin comprises the modified Rink amide linker attached to aminomethyl resin, and is an ideal tool for the Fmoc SPPS of peptide amides. Cleavage from this resin can be effected by single step treatment with 95% TFA, providing peptide amides in high yields and purities.

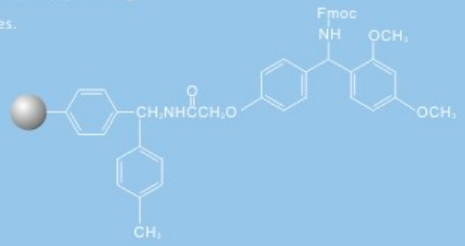


Product No.	Particle size (mesh)	Loading (mmol/g resin)	FOB Price (USD/KG)
LXSS08-1-1201	100-200 200-400	0.3-0.6	3200
LXSS08-1-1202	100-200 200-400	0.6-0.8	3200
LXSS08-1-1203	100-200 200-400	0.8-1.0	3200

9.Rink Amide-MBHA resin

4-(2',4'-Dimethoxyphenyl-Fmoc-aminomethyl)-phenoxyacetamido-MBHA resin

This resin comprises the modified Rink amide linker attached to MBHA resin, and is an ideal tool for the Fmoc SPPS of peptide amides. Cleavage fro this resin can be effected by single step treatment with 95% TFA, providing peptide amides in high yields and purities.

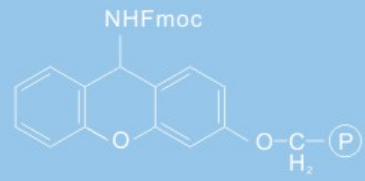


Product No.	Particle size (mesh)	Loading (mmol/g resin)	FOB Price (USD/KG)
LXSS09-1-1201	100-200 200-400	0.3-0.6	3500
LXSS09-1-1202	100-200 200-400	0.6-0.8	3500
LXSS09-1-1203	100-200 200-400	0.8-1.0	3500

10.Sieber resin

9-Fmoc-Aminoxanthen-3-yloxy-polystyrene resin

A hyper acid-labile linker or the Fmoc SPPS of protected amides via mild 1% TFA cleavage. The resin can be readily reductively alkylated to provide a support suited to the synthesis of secondary carboxamides. This resin has also been employed to produce protected peptide fragments in wich the C-terminal carboxylic acid group is blocked as a hydroxymethylphenoxy-β-alaninamide ester.

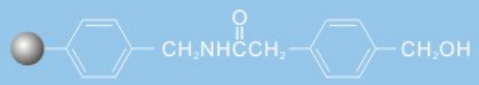


Product No	Particle size (mesh)	Loading（mmol/g resin)	FOB Price (USD/KG)
LXSS10-1-1401	100-200 200-400	0.2-0.4	7000
LXSS10-1-1402	100-200 200-400	0.4-0.6	7000
LXSS10-1-1403	100-200 200-400	0.6-0.8	7500

11.PAM resin

4-Hydroxymethyl-phenylacetamidomethyl resin

PAM resin has become the most widely used resin in Boc chemistry peptide synthesis. It has greater acid stability than Merrifield resin, making it suitable for synthesizing medium and large peptides, such as DNA binding polyamines, human matrix Gla protein(MGP), Kappa-casein. The first carboxylic acid is attached to PAM resin using an activating agent such as DCC and DMAP. These conditions can lead to partial epimerization of the amino acids, so HOBt is normally added to reduce racemization.



Product No.	Particle size (mesh)	Loading (mmol/g resin)	FOB Price (USD/KG)
LXSS11-1-1401	100-200 200-400	0.4-0.8	8000
LXSS11-1-1402	100-200 200-400	0.8-1.2	8000

1.Boc-AA-Merrifield resin

Product Name	Product No.	Particle size (mesh)	Loading (mmol/g resin)
Boc-Ala- Merrifield resin	LXSSBM01	100-200 200-400	0.3-0.6 0.6-0.8
Boc-Ala- Merrifield resin	LXSSBM02	100-200 200-400	0.3-0.6 0.6-0.8
Boc-Asn- Merrifield resin	LXSSBM03	100-200 200-400	0.3-0.6 0.6-0.8
Boc-Asp(OBzl)- Merrifield resin	LXSSBM04	100-200 200-400	0.3-0.6 0.6-0.8
Boc-Cys(Acm)- Merrifield resin	LXSSBM05	100-200 200-400	0.3-0.6 0.6-0.8
Boc-Gln- Merrifield resin	LXSSBM06	100-200 200-400	0.3-0.6 0.6-0.8
Boc-Glu(OBzl)- Merrifield resin	LXSSBM07	100-200 200-400	0.3-0.6 0.6-0.8
Boc-Gly- Merrifield resin	LXSSBM08	100-200 200-400	0.3-0.6 0.6-0.8
Boc-His(Tos)- Merrifield resin	LXSSBM09	100-200 200-400	0.3-0.6 0.6-0.8
Boc-Ile- Merrifield resin	LXSSBM10	100-200 200-400	0.3-0.6 0.6-0.8
Boc-Leu- Merrifield resin	LXSSBM11	100-200 200-400	0.3-0.6 0.6-0.8
Boc-Lys(2-Cl-Z)- Merrifield resin	LXSSBM12	100-200 200-400	0.3-0.6 0.6-0.8
Boc-Met- Merrifield resin	LXSSBM13	100-200 200-400	0.3-0.6 0.6-0.8
Boc-Phe- Merrifield resin	LXSSBM14	100-200 200-400	0.3-0.6 0.6-0.8
Boc-Pro- Merrifield resin	LXSSBM15	100-200 200-400	0.3-0.6 0.6-0.8
Boc-Ser(Bzl)- Merrifield resin	LXSSBM16	100-200 200-400	0.3-0.6 0.6-0.8
Boc-Thr(Bzl)- Merrifield resin	LXSSBM17	100-200 200-400	0.3-0.6 0.6-0.8
Boc-Trp- Merrifield resin	LXSSBM18	100-200 200-400	0.3-0.6 0.6-0.8
Boc-Tyr(Bzl)- Merrifield resin	LXSSBM19	100-200 200-400	0.3-0.6 0.6-0.8
Boc-Val- Merrifield resin	LXSSBM20	100-200 200-400	0.3-0.6 0.6-0.8

2.Boc-AA-MBHA resin

Product Name	Product No.	Particle size (mesh)	Loading (mmol/g resin)
Boc-Ala- MBHA resin	LXSSBB01	100-200 200-400	0.3-0.6 0.6-0.8
Boc-Arg(Tos)- MBHA resin	LXSSBB02	100-200 200-400	0.3-0.6 0.6-0.8
Boc-Asn- MBHA resin	LXSSBB03	100-200 200-400	0.3-0.6 0.6-0.8
Boc-Asp(OBzl)- MBHA resin	LXSSBB04	100-200 200-400	0.3-0.6 0.6-0.8
Boc-Cys(Acm)- MBHA resin	LXSSBB05	100-200 200-400	0.3-0.6 0.6-0.8
Boc-Gln- MBHA resin	LXSSBB06	100-200 200-400	0.3-0.6 0.6-0.8
Boc-Glu(OBzl)- MBHA resin	LXSSBB07	100-200 200-400	0.3-0.6 0.6-0.8
Boc-Gly- MBHA resin	LXSSBB08	100-200 200-400	0.3-0.6 0.6-0.8
Boc-His(Tos)- MBHA resin	LXSSBB09	100-200 200-400	0.3-0.6 0.6-0.8
Boc-Ile- MBHA resin	LXSSBB10	100-200 200-400	0.3-0.6 0.6-0.8
Boc-Leu- MBHA resin	LXSSBB11	100-200 200-400	0.3-0.6 0.6-0.8
Boc-Lys(2-Cl-Z)- MBHA resin	LXSSBB12	100-200 200-400	0.3-0.6 0.6-0.8
Boc-Met- MBHA resin	LXSSBB13	100-200 200-400	0.3-0.6 0.6-0.8
Boc-Phe- MBHA resin	LXSSBB14	100-200 200-400	0.3-0.6 0.6-0.8
Boc-Pro- MBHA resin	LXSSBB15	100-200 200-400	0.3-0.6 0.6-0.8
Boc-Ser(Bzl)- MBHA resin	LXSSBB16	100-200 200-400	0.3-0.6 0.6-0.8
Boc-Thr(Bzl)- MBHA resin	LXSSBB17	100-200 200-400	0.3-0.6 0.6-0.8
Boc-Trp- MBHA resin	LXSSBB18	100-200 200-400	0.3-0.6 0.6-0.8
Boc-Tyr(Bzl)- MBHA resin	LXSSBB19	100-200 200-400	0.3-0.6 0.6-0.8
Boc-Val- MBHA resin	LXSSBB20	100-200 200-400	0.3-0.6 0.6-0.8

3.Boc-AA-PAM resin

Product Name	Product No.	Particle size (mesh)	Loading (mmol/g resin)
Boc-Ala- PAM resin	LXSSBP01	100-200、200-400	0.3-0.6、0.6-0.8
Boc-Arg(Tos)- PAM resin	LXSSBP02	100-200、200-400	0.3-0.6、0.6-0.8
Boc-Asn- PAM resin	LXSSBP03	100-200、200-400	0.3-0.6、0.6-0.8
Boc-Asp(OBzl)- PAM resin	LXSSBP04	100-200、200-400	0.3-0.6、0.6-0.8
Boc-Cys(Acm)- PAM resin	LXSSBP05	100-200、200-400	0.3-0.6、0.6-0.8
Boc-Gln- PAM resin	LXSSBP06	100-200、200-400	0.3-0.6、0.6-0.8
Boc-Glu(OBzl)- PAM resin	LXSSBP07	100-200、200-400	0.3-0.6、0.6-0.8
Boc-Gly- PAM resin	LXSSBP08	100-200、200-400	0.3-0.6、0.6-0.8
Boc-His(Tos)- PAM resin	LXSSBP09	100-200、200-400	0.3-0.6、0.6-0.8
Boc-Ile- PAM resin	LXSSBP10	100-200、200-400	0.3-0.6、0.6-0.8
Boc-Leu- PAM resin	LXSSBP11	100-200、200-400	0.3-0.6、0.6-0.8
Boc-Lys(2-Cl-Z)- PAM resin	LXSSBP12	100-200、200-400	0.3-0.6、0.6-0.8
Boc-Met- PAM resin	LXSSBP13	100-200、200-400	0.3-0.6、0.6-0.8
Boc-Phe- PAM resin	LXSSBP14	100-200、200-400	0.3-0.6、0.6-0.8
Boc-Pro- PAM resin	LXSSBP15	100-200、200-400	0.3-0.6、0.6-0.8
Boc-Ser(Bzl)- PAM resin	LXSSBP16	100-200、200-400	0.3-0.6、0.6-0.8
Boc-Thr(Bzl)- PAM resin	LXSSBP17	100-200、200-400	0.3-0.6、0.6-0.8
Boc-Trp- PAM resin	LXSSBP18	100-200、200-400	0.3-0.6、0.6-0.8
Boc-Tyr(Bzl)- PAM resin	LXSSBP19	100-200、200-400	0.3-0.6、0.6-0.8
Boc-Val- PAM resin	LXSSBP20	100-200、200-400	0.3-0.6、0.6-0.8

4.Fmoc-AA-Wang resin

Product Name	Product No.	Particle size (mesh)	Loading (mmol/g resin)
Fmoc-Ala-Wang resin	LXSSFW01	100-200、200-400	0.3-0.6、0.6-0.8
Fmoc-Arg(Pbf)- Wang resin	LXSSFW02	100-200、200-400	0.3-0.6
Fmoc-Asn(Trt)- Wang resin	LXSSFW03	100-200、200-400	0.3-0.6、0.6-0.8
Fmoc-Asp(OtBu)- Wang resin	LXSSFW04	100-200、200-400	0.3-0.6、0.6-0.8
Fmoc-Cys(Trt)- Wang resin	LXSSFW05	100-200、200-400	0.3-0.6、0.6-0.8
Fmoc-Gln(Trt)- Wang resin	LXSSFW06	100-200、200-400	0.3-0.6、0.6-0.8
Fmoc-Glu(OtBu)- Wang resin	LXSSFW07	100-200、200-400	0.3-0.6、0.6-0.8
Fmoc-Gly- Wang resin	LXSSFW08	100-200、200-400	0.3-0.6、0.6-0.8
Fmoc-His(Trt)- Wang resin	LXSSFW09	100-200、200-400	0.3-0.6、0.6-0.8
Fmoc-Ile- Wang resin	LXSSFW10	100-200、200-400	0.3-0.6、0.6-0.8
Fmoc-Leu- Wang resin	LXSSFW11	100-200、200-400	0.3-0.6、0.6-0.8
Fmoc-Lys(Boc)- Wang resin	LXSSFW12	100-200、200-400	0.3-0.6、0.6-0.8
Fmoc-Met- Wang resin	LXSSFW13	100-200、200-400	0.3-0.6、0.6-0.8
Fmoc-Phe- Wang resin	LXSSFW14	100-200、200-400	0.3-0.6、0.6-0.8
Fmoc-Pro- Wang resin	LXSSFW15	100-200、200-400	0.3-0.6、0.6-0.8
Fmoc-Ser(tBu)- Wang resin	LXSSFW16	100-200、200-400	0.3-0.6、0.6-0.8
Fmoc-Thr(tBu)- Wang resin	LXSSFW17	100-200、200-400	0.3-0.6、0.6-0.8
Fmoc-Trp- Wang resin	LXSSFW18	100-200、200-400	0.3-0.6、0.6-0.8
Fmoc-Tyr(tBu)- Wang resin	LXSSFW19	100-200、200-400	0.3-0.6、0.6-0.8
Fmoc-Val- Wang resin	LXSSFW20	100-200、200-400	0.3-0.6、0.6-0.8

5.Fmoc-AA-Rink-MBHA resin

Product Name	Product No.	Particle size (mesh)	Loading (mmol/g resin)
Fmoc-Ala- Rink-MBHA resin	LXSSFK01	100-200、200-400	0.3-0.6、0.6-0.8
Fmoc-Arg(Pbf)- Rink-MBHA resin	LXSSFK02	100-200、200-400	0.3-0.6
Fmoc-Asn(Trt)- Rink-MBHA resin	LXSSFK03	100-200、200-400	0.3-0.6、0.6-0.8
Fmoc-Asp(OtBu)- Rink-MBHA resin	LXSSFK04	100-200、200-400	0.3-0.6、0.6-0.8
Fmoc-Cys(Trt)- Rink-MBHA resin	LXSSFK05	100-200、200-400	0.3-0.6、0.6-0.8
Fmoc-Gln(Trt)- Rink-MBHA resin	LXSSFK06	100-200、200-400	0.3-0.6、0.6-0.8
Fmoc-Glu(OtBu)- Rink-MBHA resin	LXSSFK07	100-200、200-400	0.3-0.6、0.6-0.8
Fmoc-Gly- Rink-MBHA resin	LXSSFK08	100-200、200-400	0.3-0.6、0.6-0.8
Fmoc-His(Trt)- Rink-MBHA resin	LXSSFK09	100-200、200-400	0.3-0.6、0.6-0.8
Fmoc-Ile- Rink-MBHA resin	LXSSFK10	100-200、200-400	0.3-0.6、0.6-0.8
Fmoc-Leu- Rink-MBHA resin	LXSSFK11	100-200、200-400	0.3-0.6、0.6-0.8
Fmoc-Lys(Boc)- Rink-MBHA resin	LXSSFK12	100-200、200-400	0.3-0.6、0.6-0.8
Fmoc-Met- Rink-MBHA resin	LXSSFK13	100-200、200-400	0.3-0.6、0.6-0.8
Fmoc-Phe- Rink-MBHA resin	LXSSFK14	100-200、200-400	0.3-0.6、0.6-0.8
Fmoc-Pro- Rink-MBHA resin	LXSSFK15	100-200、200-400	0.3-0.6、0.6-0.8
Fmoc-Ser(tBu)- Rink-MBHA resin	LXSSFK16	100-200、200-400	0.3-0.6、0.6-0.8
Fmoc-Thr(tBu)- Rink-MBHA resin	LXSSFK17	100-200、200-400	0.3-0.6、0.6-0.8
Fmoc-Trp- Rink-MBHA resin	LXSSFK18	100-200、200-400	0.3-0.6、0.6-0.8
Fmoc-Tyr(tBu)- Rink-MBHA resin	LXSSFK19	100-200、200-400	0.3-0.6、0.6-0.8
Fmoc-Val- Rink-MBHA resin	LXSSFK20	100-200、200-400	0.3-0.6、0.6-0.8

6.Fmoc-AA- Rink Amide resin

Product Name	Product No	Particle size (mesh)	Loading (mmol/g resin)
Fmoc-Ala-Rink Amide resin	LXSSFR01	100-200、200-400	0.3-0.6、0.6-0.8
Fmoc-Arg(Pbf)- Rink Amide resin	LXSSFR02	100-200、200-400	0.3-0.6
Fmoc-Asn(Trt)- Rink Amide resin	LXSSFR03	100-200、200-400	0.3-0.6、0.6-0.8
Fmoc-Asp(OtBu)- Rink Amide resin	LXSSFR04	100-200、200-400	0.3-0.6、0.6-0.8
Fmoc-Cys(Trt)- Rink Amide resin	LXSSFR05	100-200、200-400	0.3-0.6、0.6-0.8
Fmoc-Gln(Trt)- Rink Amide resin	LXSSFR06	100-200、200-400	0.3-0.6、0.6-0.8
Fmoc-Glu(OtBu)- Rink Amide resin	LXSSFR07	100-200、200-400	0.3-0.6、0.6-0.8
Fmoc-Gly- Rink Amide resin	LXSSFR08	100-200、200-400	0.3-0.6、0.6-0.8
Fmoc-His(Trt)- Rink Amide resin	LXSSFR09	100-200、200-400	0.3-0.6、0.6-0.8
Fmoc-Ile- Rink Amide resin	LXSSFR10	100-200、200-400	0.3-0.6、0.6-0.8
Fmoc-Leu- Rink Amide resin	LXSSFR11	100-200、200-400	0.3-0.6、0.6-0.8
Fmoc-Lys(Boc)- Rink Amide resin	LXSSFR12	100-200、200-400	0.3-0.6、0.6-0.8
Fmoc-Met- Rink Amide resin	LXSSFR13	100-200、200-400	0.3-0.6、0.6-0.8
Fmoc-Phe- Rink Amide resin	LXSSFR14	100-200、200-400	0.3-0.6、0.6-0.8
Fmoc-Pro-Rink Amide resin	LXSSFR15	100-200、200-400	0.3-0.6、0.6-0.8
Fmoc-Ser(tBu)- Rink Amide resin	LXSSFR16	100-200、200-400	0.3-0.6、0.6-0.8
Fmoc-Thr(tBu)- Rink Amide resin	LXSSFR17	100-200、200-400	0.3-0.6、0.6-0.8
Fmoc-Trp- Rink Amide resin	LXSSFR18	100-200、200-400	0.3-0.6、0.6-0.8
Fmoc-Tyr(tBu)- Rink Amide resin	LXSSFR19	100-200、200-400	0.3-0.6、0.6-0.8
Fmoc-Val- Rink Amide resin	LXSSFR20	100-200、200-400	0.3-0.6、0.6-0.8

7.Fmoc-AA- Rink-AM resin

Product Name	Product No	Particle size (mesh)	Loading (mmol/g resin)
Fmoc-Ala-Rink-AM resin	LXSSFA01	100-200、200-400	0.3-0.6、0.6-0.8
Fmoc-Arg(Pbf)- Rink-AM resin	LXSSFA02	100-200、200-400	0.3-0.6
Fmoc-Asn(Trt)- Rink-AM resin	LXSSFA03	100-200、200-400	0.3-0.6、0.6-0.8
Fmoc-Asp(OtBu)- Rink-AM resin	LXSSFA04	100-200、200-400	0.3-0.6、0.6-0.8
Fmoc-Cys(Trt)- Rink-AM resin	LXSSFA05	100-200、200-400	0.3-0.6、0.6-0.8
Fmoc-Gln(Trt)- Rink-AM resin	LXSSFA06	100-200、200-400	0.3-0.6、0.6-0.8
Fmoc-Glu(OtBu)- Rink-AM resin	LXSSFA07	100-200、200-400	0.3-0.6、0.6-0.8 0.8-1.0
Fmoc-Gly- Rink-AM resin	LXSSFA08	100-200、200-400	0.3-0.6、0.6-0.8
Fmoc-His(Trt)- Rink-AM resin	LXSSFA09	100-200、200-400	0.3-0.6、0.6-0.8
Fmoc-Ile- Rink-AM resin	LXSSFA10	100-200、200-400	0.3-0.6、0.6-0.8
Fmoc-Leu- Rink-AM resin	LXSSFA11	100-200、200-400	0.3-0.6、0.6-0.8
Fmoc-Lys(Boc)- Rink-AM resin	LXSSFA12	100-200、200-400	0.3-0.6、0.6-0.8
Fmoc-Met- Rink-AM resin	LXSSFA13	100-200、200-400	0.3-0.6、0.6-0.8
Fmoc-Phe- Rink-AM resin	LXSSFA14	100-200、200-400	0.3-0.6、0.6-0.8
Fmoc-Pro-Rink-AM resin	LXSSFA15	100-200、200-400	0.3-0.6、0.6-0.8
Fmoc-Ser(tBu)- Rink-AM resin	LXSSFA16	100-200、200-400	0.3-0.6、0.6-0.8
Fmoc-Thr(tBu)- Rink-AM resin	LXSSFA17	100-200、200-400	0.3-0.6、0.6-0.8
Fmoc-Trp- Rink-AM resin	LXSSFA18	100-200、200-400	0.3-0.6、0.6-0.8
Fmoc-Tyr(tBu)- Rink-AM resin	LXSSFA19	100-200、200-400	0.3-0.6、0.6-0.8
Fmoc-Val- Rink-AM resin	LXSSFA20	100-200、200-400	0.3-0.6、0.6-0.8

H-AA-Wang resin, H-AA-Rink-MBHA resin, H-AA- Rink Amide resin, H-AA- Rink-AM resin

8.H-AA-CTC resin

Product Name	Product No.	Particle size (mesh)	Loading (mmol/g resin)
H-Ala-CTC resin	LXSSAC01	100-200、200-400	0.3-0.6、0.6-0.8
H-Arg(Pbf)-CTC resin	LXSSAC02	100-200、200-400	0.3-0.6、0.6-0.8
H-Asn(Trt)-CTC resin	LXSSAC03	100-200、200-400	0.3-0.6、0.6-0.8
H-Asp(OtBu)-CTC resin	LXSSAC04	100-200、200-400	0.3-0.6、0.6-0.8
H-Cys(Trt)-CTC resin	LXSSAC05	100-200、200-400	0.3-0.6、0.6-0.8
H-Gln(Trt)-CTC resin	LXSSAC06	100-200、200-400	0.3-0.6、0.6-0.8
H-Glu(OtBu)-CTC resin	LXSSAC07	100-200、200-400	0.3-0.6、0.6-0.8
H-Gly-CTC resin	LXSSAC08	100-200、200-400	0.3-0.6、0.6-0.8
H-His(Trt)-CTC resin	LXSSAC09	100-200、200-400	0.3-0.6、0.6-0.8
H-Ile-CTC resin	LXSSAC10	100-200、200-400	0.3-0.6、0.6-0.8
H-Leu-CTC resin	LXSSAC11	100-200、200-400	0.3-0.6、0.6-0.8
H-Lys(Boc)-CTC resin	LXSSAC12	100-200、200-400	0.3-0.6、0.6-0.8
H-Met-CTC resin	LXSSAC13	100-200、200-400	0.3-0.6、0.6-0.8
H-Phe-CTC resin	LXSSAC14	100-200、200-400	0.3-0.6、0.6-0.8
H-Pro-CTC resin	LXSSAC15	100-200、200-400	0.3-0.6、0.6-0.8
H-Ser(tBu)-CTC resin	LXSSAC16	100-200、200-400	0.3-0.6、0.6-0.8
H-Thr(tBu)-CTC resin	LXSSAC17	100-200、200-400	0.3-0.6、0.6-0.8
H-Trp-CTC resin	LXSSAC18	100-200、200-400	0.3-0.6、0.6-0.8
H-Tyr(tBu) -CTC resin	LXSSAC19	100-200、200-400	0.3-0.6、0.6-0.8
H-Val-CTC resin	LXSSAC20	100-200、200-400	0.3-0.6、0.6-0.8

1. SEPLITE® PS Reversed phase chromatography

Product	Particle size（μm）	Specific surface area (m^2/g)	PH
PS 75S	20-50	600-800	2-14
PS 75M	40-90	600-800	2-14
PS 75C	75-150	600-800	2-14

2. SEPLITE® PS Ion exchange chromatography

A. SEPLITE® Q Strongly basic anion exchange chromatograghy

Product	Particle size (μm)	Specific surface area (m^2/g)	PH
Q 75S	20-50	500-800	2-14
Q 75M	40-90	500-800	2-14
Q 75C	75-150	500-800	2-14

B. SEPLITE® WAX Weakly basic anion exchange chromatography

Product	Particle size (μm)	Specific surface area (m^2/g)	PH
WAX 75S	20-50	500-800	2-14
WAX 75M	40-90	500-800	2-14
WAX 75C	75-150	500-800	2-14

C. SEPLITE® SP Strongly acidic cation exchange chromatography

Product	Particle size (μm)	Specific surface area (m^2/g)	PH
SP 75S	20-50	500-800	2-14
SP 75M	40-90	500-800	2-14
SP 75C	75-150	500-800	2-14

D. SEPLITE® CM Weakly acidic cation exchange chromatography

Product	Particle size (μm)	Specific surface area (m^2/g)	PH
CM 75S	20-50	500-800	2-14
CM 75M	40-90	500-800	2-14
CM 75C	75-150	500-800	2-14

3.Monodisperse Microsphere

Monodisperse microsphere (MP & NP) is based on the matrix of PS/DVB and MMA. The type includes the fields of Reversed Microspheres, Ion Exchange Chromatography, Affinity Chromatography, Size Exclusion Chromatography. Common particle size contains 5μm, 10μm, 15μm, 20μm, 30μm, 50μm, 75μm, 100μm; Pore size range from 100Å, 300Å to 500Å. It can meet the requirements of various separation and purification from lab analysis, pilot plant test to industrial production.

MP Polymeric Reversed Microspheres

Product No.	Particle size	Average pore size	Matrix
LXMS-5	5	100,300,500	PST-DVB
LXMS-10	10	100,300,500	PST-DVB
LXMS-15	15	100,300,500	PST-DVB
LXMS-20	20	100,300,500	PST-DVB
LXMS-30	30	100,300,500	PST-DVB
LXMS-50	50	100,300,500	PST-DVB
LXMS-75	75	100,300,500	PST-DVB
LXMS-100	100	100,300,500	PST-DVB

Non-porous Polymeric Reversed Microspheres

LXMS-3NP	3	NP(non-porous)	PST-DVB
LXMS-5NP	5	NP(non-porous)	PST-DVB
LXMS-10NP	10	NP(non-porous)	PST-DVB

4.SEPLITE® Agarose Gel Chromatography Media

Product	Property	Other brands	Application
LXP4B	Pressure proof: 0.020MPa, Peak flow rate: 14cm/h		Molecular weight of protein, polyose determination (4B: 60000-20000000; 6B: 10000-4000000)
LXP6B	Pressure proof: 0.020MPa, Peak flow rate: 14cm/h		
LXP CL 4B	Pressure proof: 0.012MPa, Peak flow rate: 26cm/h		
LXP CL 6B	Pressure proof: 0.025MPa, Peak flow rate: 30cm/h		
LXP 4FF	Pressure proof: 0.10MPa, Peak flow rate: 250cm/h	Sepharose 4FF	Purification of Macromolecule nuclear acid, bacterin, virus, etc
LXP 6FF	Pressure proof: 0.12MPa, Peak flow rate: 300cm/h	Sepharose 6FF	
DEAE-LXP FF	Protein capacity: 110mg HAS/ml	DEAE Sepharose FF	Usually used in initial purification of protein concentrate and inclusionbody, anion type used in endotoxin, etc.
CM-LXP FF	Protein capacity: 70mg Lysozyme/ml	CM Sepharose FF	
Q-LXP FF	Protein capacity: 120mg HAS/ml	Q Sepharose FF	
SP-LXP FF	Protein capacity: 80mg Lysozyme/ml	SP Sepharose FF	
Butyl LXP-4B	Petunidin capacity: 10-14 umol/ml	Butyl Sepharose 4B	Purification of bacterin etc
Phenyl LXP 6FF	Petunidin capacity: low: 20 (high 40:) umol/ml	Phenyl Sepharose 6FF	Protein renaturation

Note: Particle diameter: 50-150 um, or can be adjusted according to requirements.