

COSMOSIL Column List by Stationary Phase

Sample	Separation Mode	Packing Material	USP Code	Stationary Phase	Special Features and Applications
Organic Compounds (low M.W.)	Reversed Phase	3C ₁₈ -EB	L1	Octadecyl Group	- Excellent for basic compounds - 3 μm silica packing material
		C ₁₈ -MS-II	L1	Octadecyl Group	- Multi-purpose C ₁₈ column - Monofunctional silylation on ultra-pure silica gel for separation of the widest range of compounds
		C ₁₈ -AR-II	L1		-Features strong acid resistance and suitable for acidic compounds and peptides
		C ₁₈ -PAQ	L1		- Reversed phase column, compatible with 100% water based mobile phase. - Suitable for hydrophilic compounds
		Cholester	L101		Cholesteryl Group
		PBr	-	Pentabromobenzyl Group	- Separate hydrophilic compounds in reversed-phase conditions
		πNAP	-	Naphtylethyl Group	- Stronger π-π interaction than Phenyl column
		PYE	-	Pyrenylethyl Group	- Most powerful π-π interaction
		NPE	-	Nitrophenylethyl Group	- Separation utilizing π-π interaction and dipole-dipole interaction
		PBB-R	-	Pentabromobenzyl Group	- Separation utilizing dispersion force
		PFP	L43	Pentafluorophenyl Group	-Separation by dipole-dipole interactions.

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		CN-MS	L10	Cyanopropyl Group	- Great reproducibility using isocratic elution mode
		C ₂₂ -AR-II	-	Docosyl Group	- Alkyl chain columns except C ₁₈ column
		C ₈ -MS	L7	Octyl Group	
		C ₄ -MS	L26	Butyl Group	
		TMS-MS	L13	Trimethyl Group	
		PE-MS	L11	Phenylethyl Group	- π-π interaction
	Normal Phase	SL-II	L3	-	- Suitable for preparative separation
	Hydrophilic Interaction	HILIC	L104	Triazole	- Retains highly polar compounds that would not be retained in C ₁₈ column
Monosaccharides Oligosaccharides	Hydrophilic Interaction	Sugar-D	-	Secondary/Tertiary Amine	- Suitable for monosaccharides, oligosaccharides
		NH ₂ -MS	L8	Aminopropyl Group	- Primary amine bonded column
Proteins	Reversed Phase	Protein-R	L1	Octadecyl Group	- Provides improved separation, high recovery rate, and acid resistance
		C ₁₈ -AR-300	L1	Octadecyl Group	- Wide pore type reversed phase columns
		C ₈ -AR-300	L7	Octyl Group	
		C ₄ -AR-300	L26	Butyl Group	
		Ph-AR-300	L11	Phenyl Group	
Proteins	Gel Permeation	Diol-120-II	L20	Diol Group	- Silica-based gel filtration column - Sample MW (Protein) 5,000-100,000 Da

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		Diol-300-II			- Silica-based gel filtration column - Sample MW (Protein) 10,000-700,000 Da
		Diol-1000-II			- Silica-based gel filtration column - Sample MW (Water Soluble Polymer) 50,000 - 500,000 Da
	Ion-exchange	Type Q		Quaternary Ammonium Type	- Anion-exchange Type - For Purification - Target Sample: Acidic Proteins / DNA
		Type Q-N			- Anion-exchange Type - For Ultra-fast Analysis, Precise Analysis - Target Sample: Acidic Proteins / DNA
		Type S		Sulfopropyl Type	- Cation-exchange Type - For Purification - Target Sample: Basic Proteins
		Type S-N			- Cation-exchange Type - For Ultra-fast Analysis, Precise Analysis - Target Sample: Basic Proteins
		Type M		Quaternary Ammonium Type/ Sulfopropyl Type	- Amphoteric ion-exchange Type - For Purification - Target Sample: All Proteins
		Type M-N			- Amphoteric ion-exchange Type - For Precise Analysis - Target Sample: All Proteins

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	Hydrophobic Interaction	HIC	-	-	- Suitable for separation of peptide, and there is only a little less in enzyme activity and the tertiary structure of proteins
Fullerenes	-	Buckyprep	-	Pyrenylpropyl Group	- Standard column for fullerene separation
		Buckyprep-D	-	Nitro-carbazoyl Group	- Designed for separation of fullerene derivatives
		Buckyprep-M	-	Phenothiazinyl Group	- Designed to separate metallofullerenes
		PBB	-	Pentabromobenzyl Group	- Designed for preparative separation of C ₆₀ , C ₇₀
		PYE	-	Pyrenylethyl Group	- Separation of Fullerenes and structural isomers
		NPE	-	Nitrophenylethyl Group	- Separation of derivatived fullerene
Carbon Nanotubes	Gel Permeation	CNT		Hydrophilic Group	- Separation of carbon nanotubes