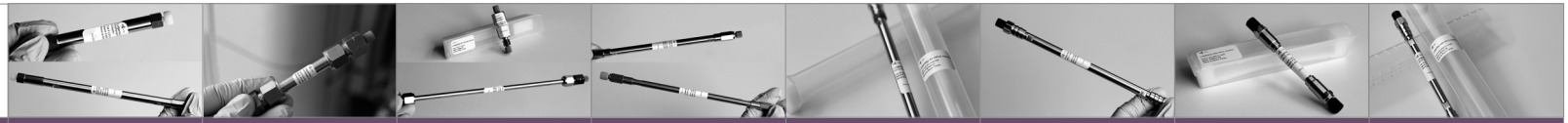
Ludger

LudgerSep™ HPLC and UHPLC Columns



Catalogue #	LS-C2-4.6x50 and LS-C2-4.6x150	LS-C3-7.5x75	LS-N1-4.6x10 and LS-N1-4.6x250	LS-N2-4.6x150 and LS-N2-2.1x150	LS-R1-4.6x150	LS-R2-4.6x150	LS-UR2-2.1x50	LS-UR2-2.1x100
Column	**C2 anion exchange HPLC column**	**C3 anion exchange HPLC column**	**N1 amide HPLC column**	**N2 amide HPLC column**	**R1 HPLC column**	**R2 HPLC column**	**uR2 UHPLC column for monosaccharide analysis**	**uR2 DMB UHPLC column for sialic acid analysis**
Application	Separation of negatively charged glycans into neutral, mono, di, tri and tetra species.	Separation of negatively charged glycans into neutral, mono, di, tri and tetra species.	Separation of fluorophore labelled glycans according to size and shape.	Separation of fluorophore labelled glycans according to size and shape.	Separation of DMB labelled sialic acids on HPLCs	Monosaccharide analysis on HPLC systems	Monosaccharide analysis on UHPLC systems	Separation of DMB labelled sialic acids on UHPLCs
Description	Polystyrene particles with a macroporous polymeric anion exchange coating optimized for anion exchange chromatography. (1000 Angstrom pore size)	The C3 HPLC column contains macroporous (1000 Angstrom) anion exchange particles optimized for anion exchange chromatography of complex glycan mixtures.	LudgerSep N1 HPLC columns contain 5 um particles (80 Angstrom pore size) with a polymeric amide coating suitable for low resolution chromatography of complex glycan mixtures where UHPLC is not available.	LudgerSep N2 HPLC columns contain 3 um particles (80 Angstrom pore size) with a polymeric amide coating suitable for low resolution chromatography of complex glycan mixtures where UHPLC is not available and quicker gradients than N1 are required	The LudgerSep R1 HPLC column contains particles with an octadecylsilane coating optimized for hydrophobic chromatography. 120 Angstrom pore size	The LudgerSep R2 HPLC column contains particles with an octadecylsilane coating optimized for hydrophobic chromatography. It is optimized to handle efficient elution of the monosaccharides from the free dye peak. 175 angstrom pore size	The LudgerSep uR2 UHPLC column contains particles with an octadecylsilane coating optimized for hydrophobic chromatography. It is optimized to handle efficient elution of the monosaccharides from the free dye peak. 175 angstrom pore size	The LudgerSep uR2 UHPLC column contains particles with an octadecylsilane coating optimized for hydrophobic chromatography.
Particle size	8 um	10 um	5um	3um	3um	3um	1.9um	1.9um
Column Dimensions (width x length)	4.6mm x 50mm OR 4.6mm x 150 mm	7.5mm x 75mm	4.6mm x 10 mm OR 4.6mm x 250mm	4.6mm x 150mm OR 2.1mm x 150mm	4.6mm x 150mm	4.6mm x 150mm	2.1mm x 50mm	2.1mm x 100mm
Flow Rates	1mL/min	0.3 – 1.2mL/min	0.4 mL/min typical	0.4 mL/min typical	0.3 mL/min	0.3-2mL/min	0.4mL/min	0.25mL/min
Pressure	Max 3000 psi (207 bar)	Max 2175 psi (150 bar)	Max 2175 psi (150 bar)	Max 2900 psi (200 bar)	Max 5800 psi (400 bar)	Max 5800 psi (400 bar)	Max 18000 psi (1250 bar)	Max 18000 psi (1250 bar)
pH Range	1-14 pH stable	2-12	2-7.5	2-7.5	2-8	1-11	1-11	1-11
Temperature	10-80 °C	10-45 °C	30 °C typical (range 10-80 °C)	30 °C typical (range 10-50 °C)	60 °C max	60 °C max	60 °C max	60 °C max
Solvents	Acetonitrile, 20-500mM ammonium formate or ammonium acetate solvents	Acetonitrile, 20-500mM ammonium formate or ammonium acetate solvents	Acetonitrile and 50-250mM ammonium formate pH4.4	Acetonitrile and 50-250mM ammonium formate pH4.4	Acetonitrile + methanol mix	Solvent A: 0.2% butylamine/ 0.5% phosphoric acid/ 1% tetrahydrofuran in purified water. Solvent B: Acetonitrile	Solvent A: 0.2% butylamine/ 0.5% phosphoric acid/ 1% tetrahydrofuran in purified water. Solvent B: Acetonitrile	Acetonitrile + methanol mix
Companion Products	LudgerSep C Buffer x4 Concentrate LS-C-BUFFX4	LudgerSep C Buffer x4 Concentrate LS-C-BUFFX4	LudgerSep N Buffer x40 Concentrate LS-N-BUFFX40	LudgerSep N Buffer x40 Concentrate LS-N-BUFFX40	--	LudgerSep R BPT solvent x10 concentrate LS-R-BPTX10	LudgerSep R BPT solvent x10 concentrate LS-R-BPTX10	--
Product Guide	ludger-ls-c2-guide	ludger-ls-c3-guide	ludger-ls-n1-guide	ludger-ls-n2-guide	ludger-ls-r1-guide	ludger-ls-r2-guide	ludger-ls-ur2-guide	ludger-ls-ur2-dmb-guide