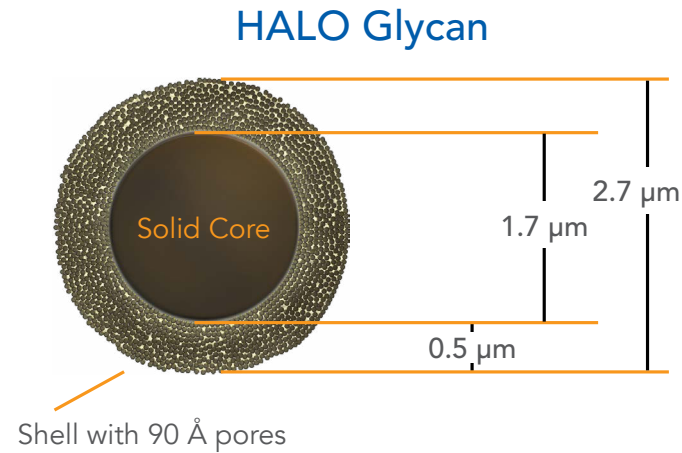
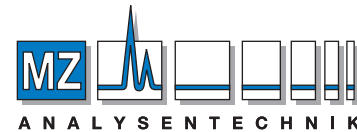
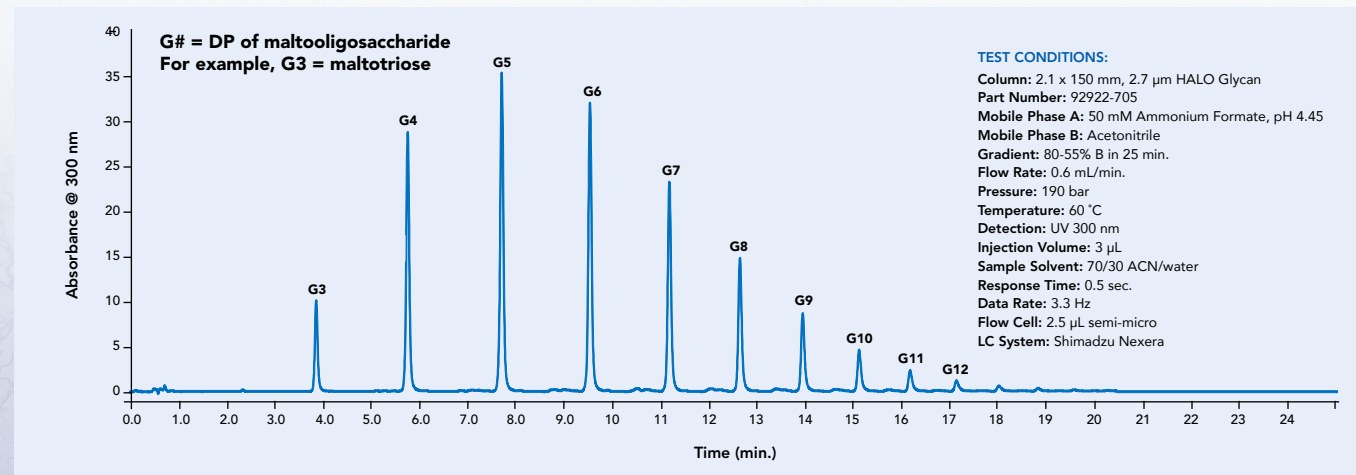


- ♦ 90 Ångstrom pore size
- ♦ Incorporates a highly polar ligand that contains 5 hydroxyl groups tethered to 2.7 µm Fused-Core silica particles via novel, proprietary linkage chemistry (Table F)
- ♦ Ideal for hydrophilic interaction liquid chromatography (HILIC) separations of oligosaccharides, and particularly, of released and labeled glycans from glycoproteins and proteoglycans
- ♦ Mobile phases typically consist of acetonitrile and aqueous ammonium formate buffer (50 mM, pH 4.4) used to form a gradient of increasing water content during elution
- ♦ Each lot of HALO Glycan material is tested for quality assurance (Figure KK) by separation of a procainamide-reducing-end-labeled glycan ladder of oligosaccharides having 2–25 glucose units (GU),
 - Peaks for oligosaccharides composed of 5 and 10 GU must meet tight specifications for retention and peak width before lot is approved for glycan analysis
- ♦ 2 µm inlet frit
- ♦ Pressure limit, 600 bar/9000 psi



QA ANALYSIS OF HALO GLYCAN

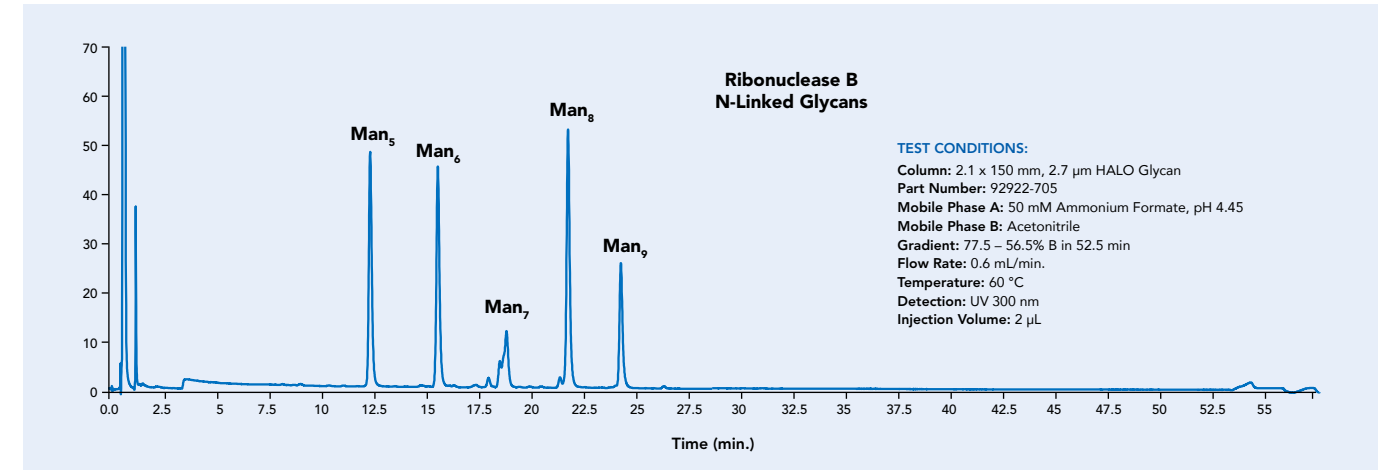
Figure KK. Example QA Chromatogram for HALO Glycan column. Each HALO Glycan packing lot is tested using this glycan ladder mixture to assess and ensure lot-to-lot reproducibility.



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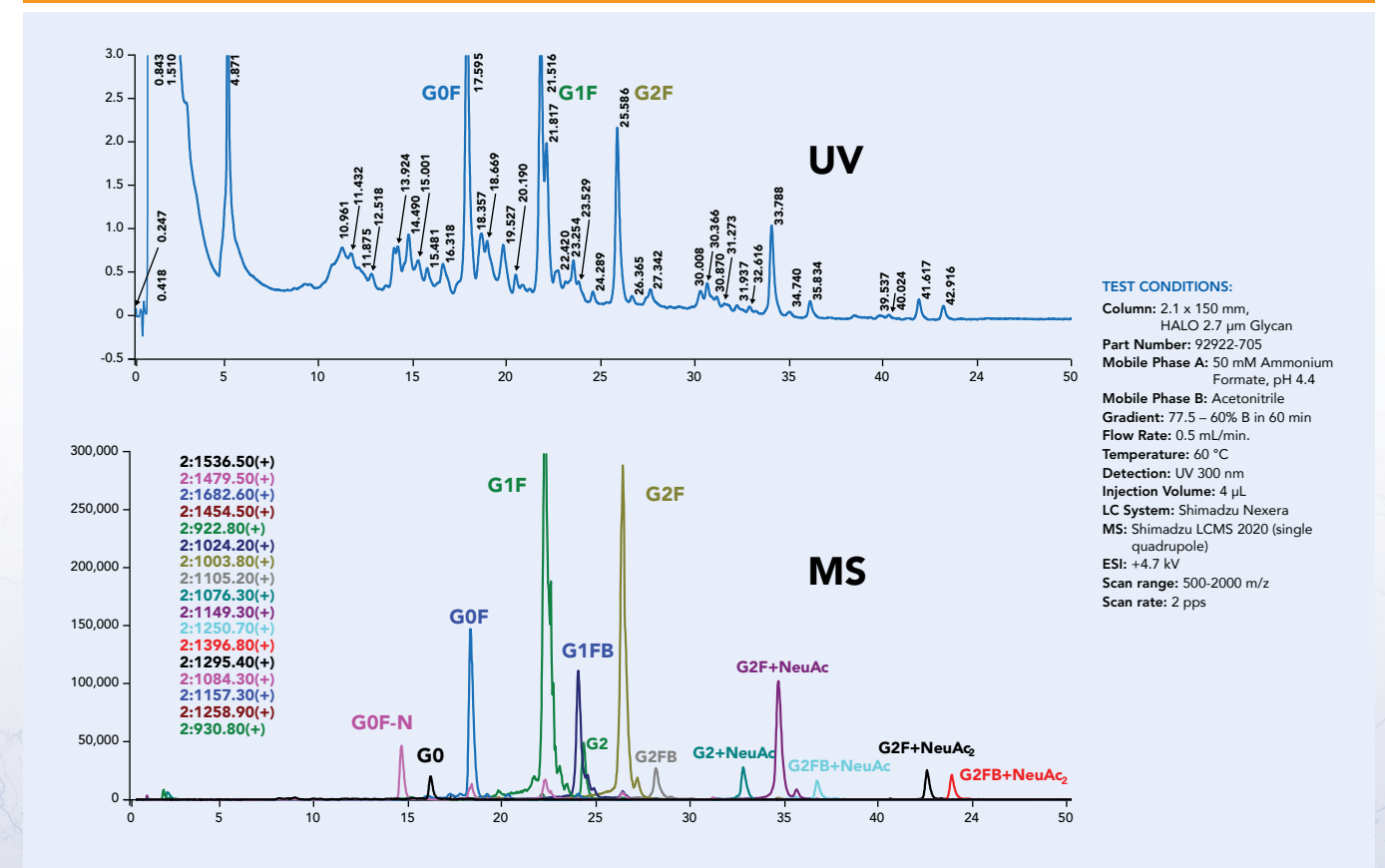
SEPARATION OF N-LINKED GLYCANS FROM RIBONUCLEASE B

Figure LL. Gradient HILIC-MS separation of N-linked glycans, which had been released using PNGase from ribonuclease B, using the HALO Glycan column.



SEPARATION OF N-LINKED GLYCANS FROM HUMAN IgG

Figure MM. Released- and procainamide-labeled glycans from human IgG were separated using a 2.1 x 150 mm HALO Glycan column and detected using UV and selected-ion-monitoring MS detection.

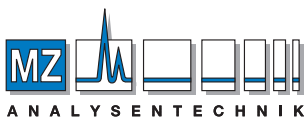


HALO GLYCAN COLUMNS

HALO Glycan columns are available in 2.1 and 4.6 mm diameters in the following lengths in 2.7 μm particle sizes. Guard columns are available for UHPLC and HPLC applications if additional protection is desired.

<i>Dimensions (in mm)</i>	HALO Glycan
2.1 x 50	92922-405
2.1 x 100	92922-605
2.1 x 150	92922-705
4.6 x 50	92924-405
4.6 x 100	92924-605
4.6 x 150	92924-705
Guard Columns, 3-pack	
<i>Dimensions (in mm)</i>	HALO Glycan
2.1 x 5	92922-105
4.6 x 5	92924-105
Guard Column Holder	94900-001

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or contact one of our distributors.



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