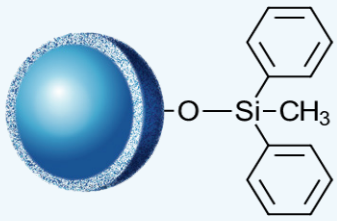
HALO® 400 Å DIPHENYL

BIOCLASS PROTEIN 400 Å DIPHENYL

The HALO 400 Å Diphenyl is a complimentary phase to your protein characterization and release assay needs. Designed on a 3.4 µm particle providing the speed, ruggedness and resolution desired for quick release assays and flexible to method conditions to express necessary critical quality attributes.



ADVANTAGES OF HALO® DIPHENYL

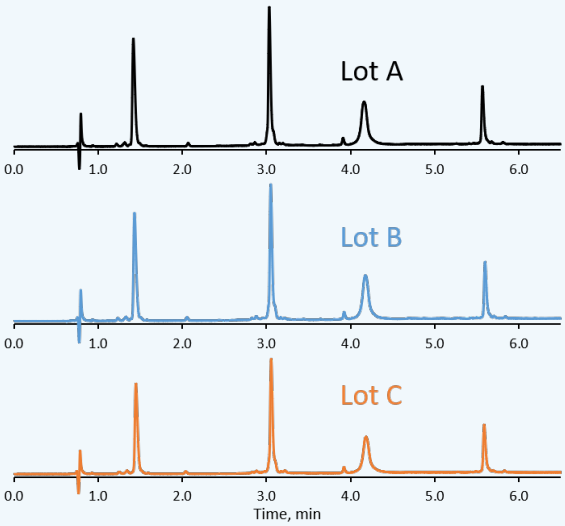
- Extremely stable bonded phase using proven Fused-Core® Technology
- Best in class low temperature performance without recovery loss
- LCMS compatible

Best Application

- Proteins
- Polypeptides
- mAbs
- Fast release assays

HALO 400 Å Diphenyl Lot-to-Lot Comparisons

HALO 400 Å Diphenyl exhibits excellent lot-to-lot reproducibility using a mixture of four different proteins.

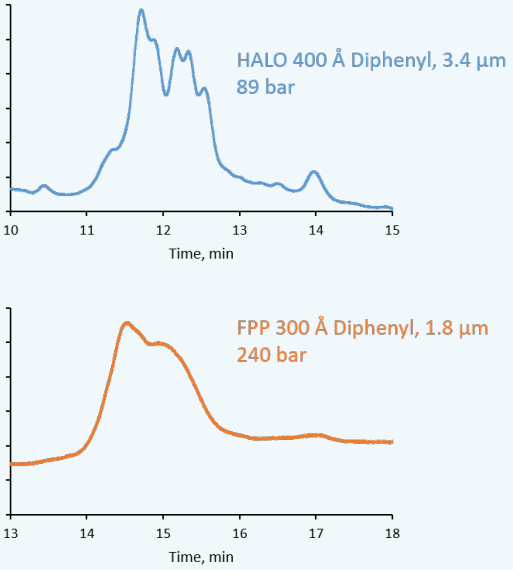


TEST CONDITIONS

Columns: HALO® 400 Å Diphenyl, 3.4 µm, 2.1 x150 mm
Flow Rate: 0.4 mL/min
Temperature: 60 °C
Injection Volume: 2 µL
Instrument: Shimadzu Nexera
Detection: PDA at 280 nm
Mobile Phase A: water/0.1% TFA
Mobile Phase B: 20/80 water/ACN/0.085% TFA
Gradient: 31-62.5% B in 15 min
Peak Identities: ribonuclease A, cytochrome c, holo-transferrin, apomyoglobin (in elution order)

Increased Resolution with HALO 400 Å Diphenyl Compared to FPP 300 Å Diphenyl

HALO 400 Å Diphenyl outperforms a FPP 300 Å Diphenyl column with increased resolution as well as 2.7 times lower back pressure. The 400 Å pores enable improved access to the bonded phase.



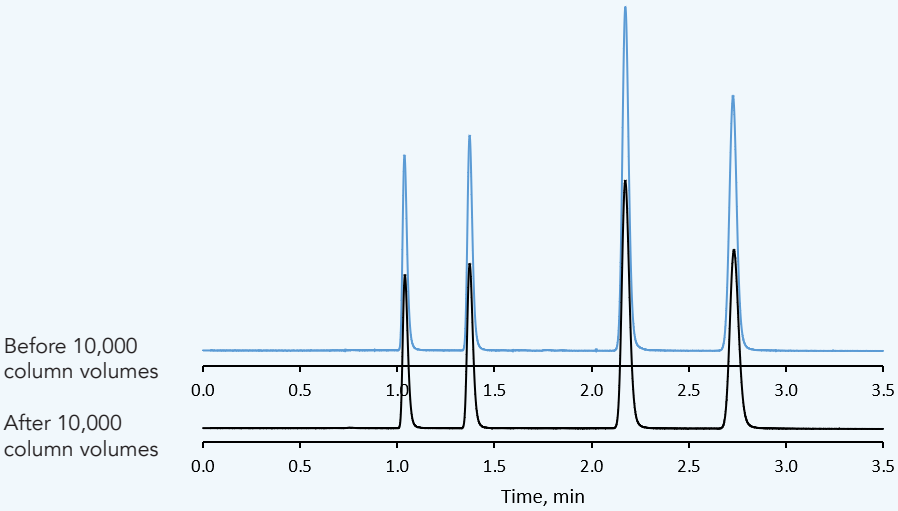
TEST CONDITIONS

Columns: HALO 400 Å Diphenyl, 3.4 µm, 2.1 x 150 mm
FPP 300 Å Diphenyl, 1.8 µm, 2.1 x 150 mm
Flow Rate: 0.2 mL/min
Temperature: 60 °C
Injection Volume: : 2 µL of 2 mg/mL denosumab
Instrument: Shimadzu Nexera
Detection: PDA at 220 nm
Mobile Phase A: 88/10/2 water/ACN/n-propanol + 0.1% DFA
Mobile Phase B: 70/20/10 n-propanol/ACN/water + 0.1% DFA
Gradient: 18-28% B in 20 min

INNOVATION YOU CAN TRUST - PERFORMANCE YOU CAN RELY ON

HALO 400 Å Diphenyl Ruggedness

The stability of HALO 400 Å Diphenyl columns is demonstrated by the chromatograms which were run before and after the column was run at 600 bar for 10,000 column volumes. Both peak shape and back pressure are maintained.



TEST CONDITIONS

Column: HALO 400 Å Diphenyl, 3.4 µm, 2.1 x 150 mm
Flow Rate: 0.3 mL/min
Temperature: 30 °C
Injection Volume: 0.5 µL
Instrument: Shimadzu Nexera
Detection: PDA at 254 nm
Mobile Phase A: water
Mobile Phase B: ACN
Isocratic: 75/25 A/B
Peak Identities: uracil, phenol, propiophenone, 1-Cl-4-nitrobenzene (in elution order)

HALO 400 Å Diphenyl, 3.4 µm

Ligand: Diphenylmethyl
Particle Size: 3.4 µm
Pore Size: 400 Å

USP Designation: L11
Surface Area: 15 m^2/g

Endcapped: Yes
Low pH Limit /Max T: 2/90°C
High pH Limit/Max T: 9/40°C

INTRODUCTORY PART NUMBERS

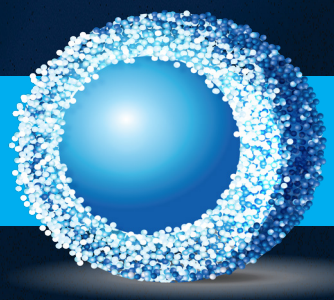
ANALYTICAL COLUMNS

Dimensions: ID x Length (in mm)	Diphenyl
2.1 x 50	93412-426
2.1 x 100	93412-626
2.1 x 150	93412-726
4.6 x 50	93414-426
4.6 x 100	93414-626
4.6 x 150	93414-726

GUARD COLUMNS

Guard columns, 3-pack

Dimensions: ID x Length (in mm)	Diphenyl
2.1 x 5	93412-126
4.6 x 5	93414-126
Guard Column Holder	94900-001



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