

Biozen dSEC-2 Guard Columns

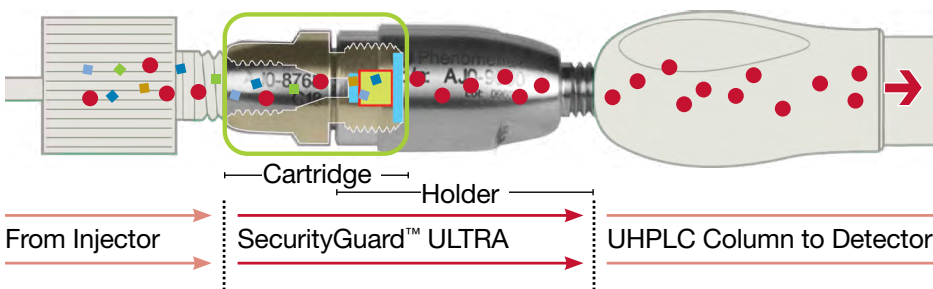
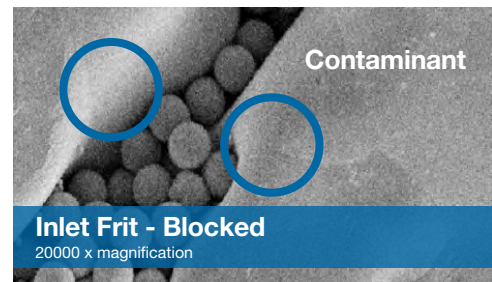
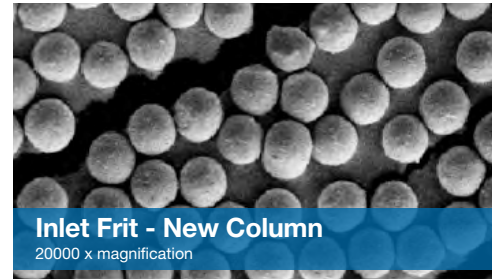
Why Biozen Guards?

Samples introduced onto the Biozen dSEC column can be diverse and complex. These samples have components that might not be compatible with traditional size exclusion HPLC method conditions. Injecting such samples without proper sample preparation or pre-treatment might lead to clogging of the column.

Residual proteins and hydrophobic compounds such as lipids are often not completely eluted during size exclusion separations and can adhere to the phase slowly leading to column issues and cause premature column failure. With size exclusion there are two major challenges, column fouling and bed stability.

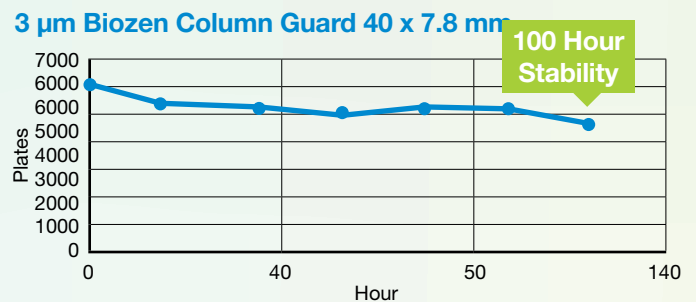
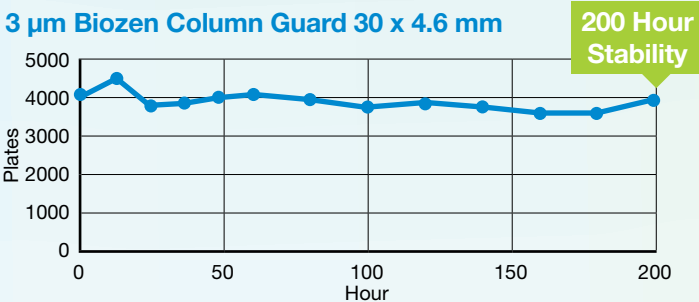
Now that we know the possible ways in which a column can get blocked. How do we protect it?

To protect size exclusion columns it is recommended to use a guard column.



How do Biozen guard columns and cartridges extend column lifetime?

To challenge the bed stability of the dSEC-2 guard column we have tested efficiency over a prolonged period of time continuously running mobile phase shown in the figure below. Sequential injections showed no loss of efficiency for over 100 hours when testing both the 4.6mm and 7.8mm ID. In addition column clogging was tested using a challenging mix of proteins and showed less than a 25% loss of efficiency after 100 hours of use.

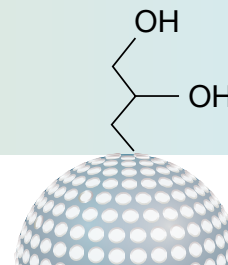


Ordering Information



Biozen dSEC-2 Guard Columns

Part No.	Description	Suggested Use
03Q-4788-K0	40 x 7.8 mm guard column	All 7.8 mm ID columns
03A-4788-E0	30 x 4.6 mm guard column	All 3 µm packed 4.6 mm ID columns Any 4.6 mm ID columns used with organic in the mobile phase
AJ0-9852	Security Guard ULTRA 2.1 mm ID	All 2.1 mm ID columns
AJ0-9853	Security Guard ULTRA 4.6 mm ID	All 1.8 µm packed 4.6 mm ID columns. Any low use 3 µm packed 4.6 mm ID columns



Biozen dSEC-2
1.8µm and 3µm

Inert, high-strength porous particle for the separation and quantitation of monoclonal antibody aggregate and fragments



SecurityGuard ULTRA Cartridge Holder

Part No.	Description	Unit
AJ0-9000	SecurityGuard ULTRA Cartridge Holder	ea



Recommended Connections

Part No.	Description
AQ0-1392	PEEK Sure-lok Coupler, 0.010 in ID
AJ1-2411	SecurityLINK PEEKsil double sided 100 µm, 100 mm

