

High Performance Packed Column for HPLC

CoreFocus

Shim-pack Scepter™ Guard column (EXP)

INSTRUCTION MANUAL

■ Introduction

Shim-pack Scepter Guard column (EXP) is cartridge-type guard column filled with high pressure packing materials. Please read the following instructions before use.

■ Specifications

The product specifications are as follows.

Size	Products name	Chemical bonding group
I.D. : 2.1 mm, 3 mm Length : 5 mm Particle size : 1.9 μm	Shim-pack Scepter C18 Shim-pack Scepter HD-C18	Octadecyl group (C18)
	Shim-pack Scepter C8	Octyl group (C8)
	Shim-pack Scepter C4-300	Butyl group (C4)
	Shim-pack Scepter Phenyl	Phenyl group
	Shim-pack Scepter PFPP	Pentafluorophenyl group

■ Operating Precautions

Check if anything is missing or damaged. If there are any signs of damage, notify your local Shimadzu representative at once.

■ Installing the column

Please note the following when you install the cartridge column.

- The optional EXP cartridge holder is required when you install the column.
- The guard cartridge column can be replaced by hand.
- The EXP cartridge holder can be used repeatedly. In case of degradation, replace the cartridge column only.

■ Use method

Tubing-Side Connection

- 1) Slide the EXP nut and an EXP ferrule onto the connecting tubing. The PEEK end of the ferrule should face away from the nut.
- 2) Push the tubing into the EXP holder cap. Keep the tubing fully bottomed in the holder cap and tighten the nut by hand.
- 3) Continue to keep the tubing fully bottomed in the EXP holder cap and use a wrench to tighten the nut an additional 1/4-1/2 turn past hand-tight.

Column-Side Connection

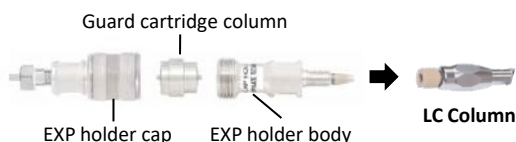
- 1) Slide an EXP ferrule into the front end of the EXP holder body so that the PEEK end of the ferrule faces away from the EXP holder body.
- 2) Thread the EXP holder body into the LC column to the point of initial resistance. Push the EXP holder body into the column and fully tighten by hand.
- 3) Continue to push the EXP holder body into the column and use a wrench to tighten the EXP holder body an additional ¼-½ turn past hand-tight.

Guard Cartridge Column Installation

- 1) Unscrew the EXP holder cap by hand and insert the unidirectional guard cartridge column into the EXP cartridge holder body.
- 2) Screw the EXP holder cap onto the EXP holder body and tighten fully by hand.

Guard Cartridge Column Replacement

To replace the guard cartridge column, unscrew the EXP holder cap by hand, insert a new guard cartridge column, replace the EXP holder cap, and fully tighten the EXP holder cap by hand.



■ Safety Guideline

- Select the guard cartridge columns whose functional groups are basically the same as those of the main column.
- The EXP cartridge holder for Shim-pack Scepter (PN: 227-31170-01) is sold separately.
- Failure to fully hand tighten the EXP holder cap (about 1/8 turn past point of initial resistance) may result in leakage or damage to the guard cartridge column.
- If the guard cartridge column is attached and detached repeatedly, the airtightness may be lost, and fluid may leak.
- The timing when you replace the guard cartridge column should be determined by the increase of pressure, the change of peak shapes and the separations, etc.

- If you inject a large amount of a sample repeatedly, it may cause impurities to be adsorbed in the main column. Therefore, it may deteriorate the main column. Early replacement of the guard cartridge column is recommended to prevent contamination of main column.

■ Technical Support

Shim-pack Scepter series columns are manufactured, inspected, packaged and shipped under strict standards of quality control. Should you find any defect in performance, please contact your local Shimadzu representative, who will ensure your complete satisfaction.