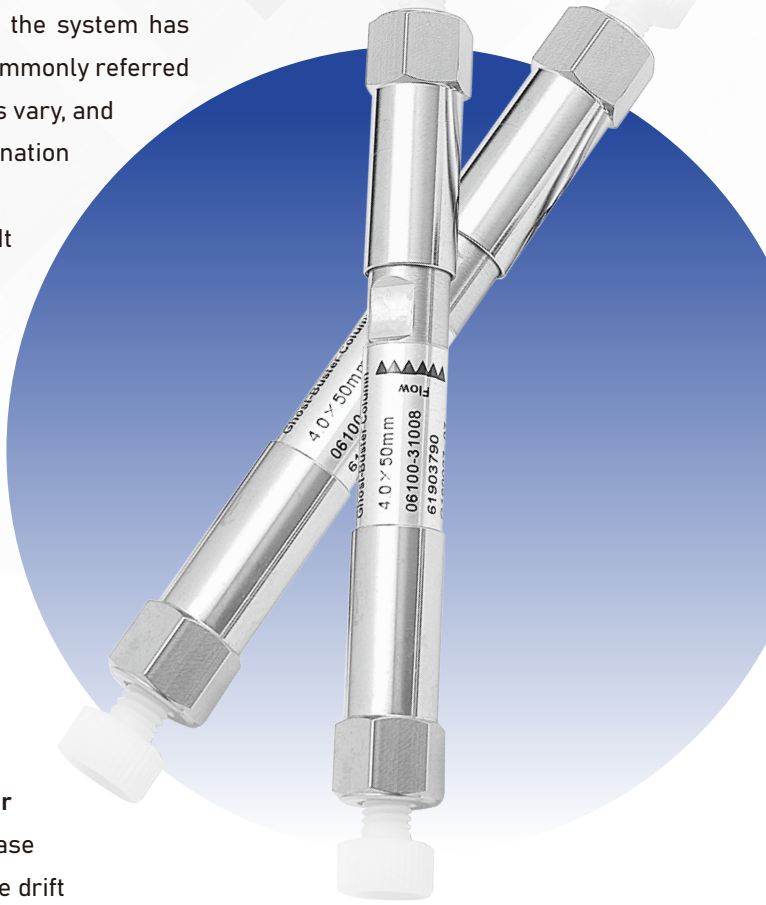
Ghost-Buster Column

Effective Elimination of Ghost Peaks in HPLC Analysis

During HPLC separation, especially in gradient elution or when the system has been used for a long period, sporadic and unpredictable peaks (commonly referred to as “ghost peaks”) are likely to appear. The causes of ghost peaks vary, and the primary ones are impurities in the mobile phase and contamination within the instrument system.

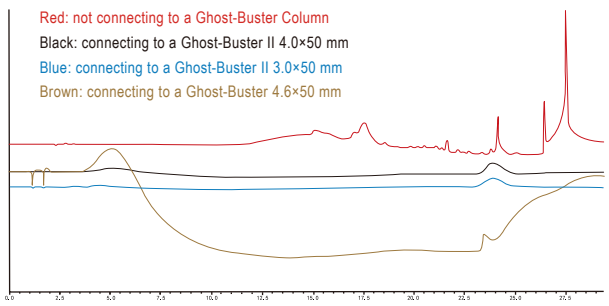
At Welch Materials, we've launched the **Ghost-Buster column**. It effectively absorbs and removes impurities from the system, thereby preventing interference from impurity on the target peaks.



Product Features

- **Ghost-Buster Columns** not only remove impurities from the mobile phase but also effectively capture contaminants within the plumbing and mixer, eliminating interferences from ghost peaks in analyses, enhancing workflow efficiency, and extending the lifespans of columns and instruments to some extent.
- Through further upgrades and refinements, **Ghost-Buster Columns II** not only achieve superior adsorption of mobile-phase impurities to eliminate ghost peaks, but also address the baseline drift caused by an excessively high initial aqueous proportion in gradient runs, yielding a markedly more stable baseline.
- **Ghost-Buster UP Columns**, rated to withstand pressures up to 90 MPa, offer seamless compatibility with UHPLC systems.

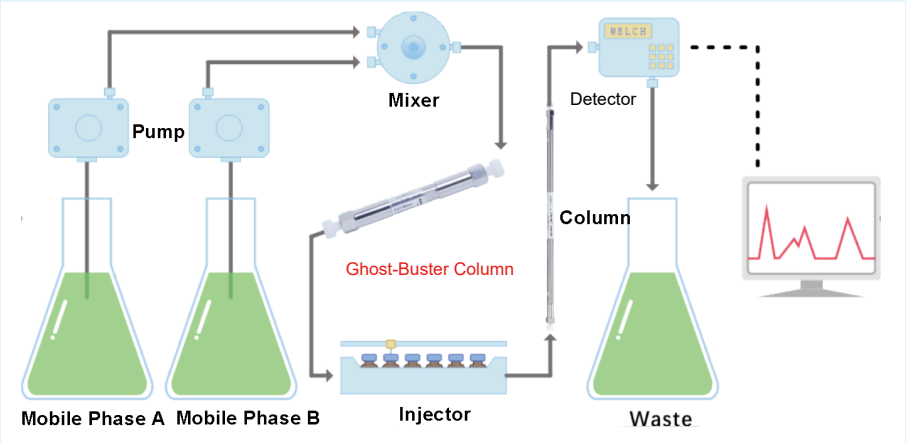
Application Case



Column:	Ultisil AQ-C18, 4.6×100 mm, 3 µm
Flow Rate:	1.0 mL/min
Volume:	5 µL
Wavelength:	210 nm
Temperature:	25°C
Mobile Phase A:	0.05% Phosphoric acid
Mobile Phase B:	Acetonitrile

Installation:

Install Ghost-Buster Columns between the gradient mixer and the autosampler, ensuring they are placed before the autosampler. If installed after the autosampler, the column may strongly adsorb the sample, leading to interference.



Precautions

1. For a new column, flush with 80% methanol–in-water at 1.0 mL/min for 15 minutes before installation.
2. Not all impurities present in the mobile phase can be adsorbed by the Ghost-Buster Column.
3. When using ion-pairing reagents in the mobile phase, these reagents may be retained by the Ghost-Buster Column, potentially affecting analyte retention times or peak shapes. **Under such conditions, evaluate chromatographic performance to determine whether to employ the Ghost-Buster Column.**
4. If adsorption efficiency declines, **replace the column promptly; it is not intended for unlimited reuse.**

Ordering Information

Product	P/N	Specification	Max. pressure	Applied Equipment
Ghost-Buster Column	06100-31000	4.6x50 mm	40 MPa	HPLC
Ghost-Buster Column	06100-31001	7.8x50 mm	40 MPa	HPLC
Ghost-Buster Column	06100-31018	3.0x33 mm	40 MPa	HPLC
Ghost-Buster HP Column	06100-31021	2.1x33 mm	40 MPa	HPLC
Ghost-Buster Column	06100-31025	2.1x50 mm	40 MPa	HPLC
Ghost-Buster Column II	06100-31008	4.0x50 mm	40 MPa	HPLC
Ghost-Buster Column II	06100-31016	3.0x50 mm	40 MPa	HPLC
Ghost-Buster Column II	06100-31026	4.6x30 mm	40 MPa	HPLC
Ghost-Buster Column II	06100-31027	4.0x30 mm	40 MPa	HPLC
Ghost-Buster UP Column	06100-31030	2.1x30 mm	90 MPa	UHPLC
Ghost-Buster UP Column	06100-31031	2.1x50 mm	90 MPa	UHPLC

*Only some of the product specifications are listed here. For more information, please consult the sales team.