

Recover an HPLC Column That Has Had Ammonium Acetate Precipitated In It - Troubleshooting

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Preventing Peak Splitting After Buffer Use

If you notice peak splitting after storing your column, try this first:

Wash the column for 2 hours with a 70:30 water/acetonitrile mixture, then retest for peak shape.

Important Note:

If your method uses a buffer—such as 16 mM ammonium acetate—and you store the column in pure acetonitrile immediately afterward, peak splitting may occur the next time you run the buffered method. This happens because ammonium acetate is insoluble in pure acetonitrile and can precipitate inside the column.

To prevent this:

- Always flush the buffer out of the column before introducing a pure organic solvent.
- A thorough wash with a water/organic mixture helps avoid precipitation and maintain column performance.

