

I would recommend that every research scientist have a ZirChrom-PBD column on hand for his/her toughest separations.

In our case, we had a very small hydrophilic impurity and a larger very hydrophobic pharmaceutical compound that we needed to separate. The separation on any silica-based column that we tried was poor and not very robust. One of the analytes was completely unretained (even in 100% water) while the other analyte was too well retained.

We used the ZirChrom-PBD column with phosphate in the mobile phase as a mixed-mode (reversed-phase/cation-exchange) support that easily separated the two compounds. We were able to manipulate the separation factor through the amount of organic in the mobile phase and/or through a change in the ionic strength of the mobile phase. The final optimized separation was very robust and had a unique selectivity from any other column that was tried.

Senior Research Scientist
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