## Guidance for first-time purification success for your precious targets

## **PERFORMANCE GAPS**

Predictably scaling an LC separation to purify molecular targets is not trivial and the risk of sample loss is real. Leaving success to chance is a risk many chemists just will not accept. Method conditions need to be maintained and care taken to achieve direct scale-up in prep separations. By following just 5 simple rules for LC scale up, you are likely to avoid surprising outcomes such as inadequate compound purity (requiring rework) and target recovery loss.







## Bridge the gap from analytical to prep when scaling to purify

Apply these 5 simple rules of direct scaling for on-target outcomes in PREP



| RULE #1         | RULE #2     | RULE #3         | RULE #4             | RULE #5         |
|-----------------|-------------|-----------------|---------------------|-----------------|
| Scale flow rate | Choose your | Always be       | Leverage            | Employ a robust |
| and sample load | modifier    | consistent with | identical column    | PREP column     |
| proportionally  | wisely      | column volumes  | attributes and      | with uniform    |
|                 |             |                 | similar L/dp ratios | bed packing     |



Waters OBD preparative columns help bridge the performance gap in PREP LC with uniform, optimum packed bed density throughout the entire length and diameter of the column. Direct scalability from analytical to PREP, excellent column lifetime, and consistent column to column performance result in good resolution, peak shape, and mass loading for unparalleled preparative chromatography results. Trust in *on-target* results for successful PREP LC purification with OBD Technology.

| <prep columns=""></prep>  | <uplc columns=""></uplc> | <obd chart="" wall=""></obd> | <prep calculator=""></prep> |  |  |  |
|---|--------------------------|------------------------------|-----------------------------|--|--|--|
| waters.com/prep   |                          |                              |                             |  |  |  |
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