

## Application Note

# Fast and Simple Bioanalytical Plasma Sample Extraction Using Oasis® PRiME HLB SPE for High Analyte Recovery

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This is an Application Brief and does not contain a detailed Experimental section.

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## Abstract

This application describes a fast and simple method for bioanalytical sample preparation from plasma. Utilizing Oasis PRiME HLB solid-phase extraction (SPE), the protocol requires no method development and achieves high recovery and low matrix effects for several small molecule pharmaceuticals.

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## Experimental

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**Oasis PRiME HLB SPE Protocol**  
96-well plate, 3 mg sorbent per well,  
P/N 186008052



**Sample pretreatment:**

200  $\mu$ L 4%  $H_3PO_4$  to 200  $\mu$ L  
plasma sample

**Load:**

400  $\mu$ L pre-treated sample

**Wash:**

200  $\mu$ L 95:5 Water: Methanol

**Elute:**

2x 25  $\mu$ L 90:10  
Acetonitrile/Methanol

**Dilute:**

50  $\mu$ L  $H_2O$

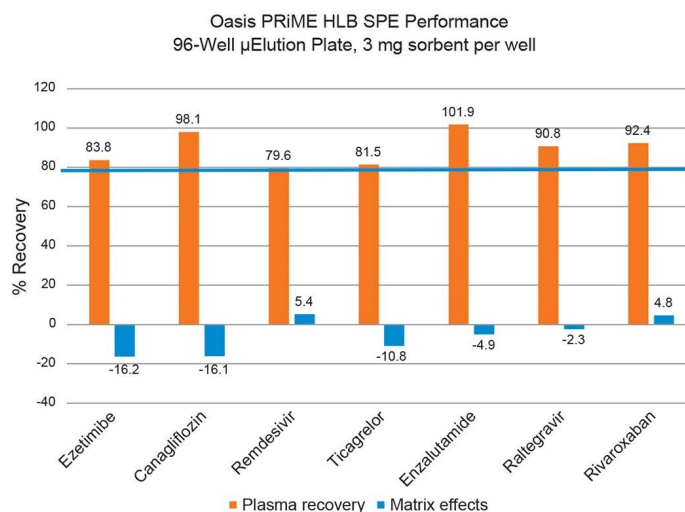


Figure 1. Demonstration of Oasis PRiME HLB SPE bioanalytical performance, requiring no optimization of the starting protocol, with high recovery ( $> 79\%$ ) and low matrix effects ( $-16.2$  to  $5.4\%$ ) for several pharmaceuticals extracted from plasma.

## Results and Discussion

High Analyte Recovery with low matrix from plasma is achieved Using Oasis PRiME HLB SPE for top-selling small molecule pharmaceuticals in 2023.<sup>1</sup>

## References

1. Williams, RE and Leatherwood HM [Top 200 Small Molecule Drugs by Retail Sales in 2023](https://bpb-us-e2.wpmucdn.com/sites.arizona.edu/dist/9/130/files/2024/05/2023Top200SmallMoleculePosterV5.pdf) <<https://bpb-us-e2.wpmucdn.com/sites.arizona.edu/dist/9/130/files/2024/05/2023Top200SmallMoleculePosterV5.pdf>> .  
(accessed 21 June 2024).

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