

Product Information

SigMatrix Ultra Serum Diluent

Buffered Recombinant Human Serum Albumin

D5197

Storage Temperature: -25 °C to -10 °C

Product Description

This solution is provided ready-to-use as a 2% (w/v) recombinant HSA (Human Serum Albumin) in PBS (Phosphate Buffered Saline), pH 7.4. This formulation has been shown to be appropriate for use as a sample diluent or matrix for preparing calibrants/controls for LC-MS/MS assays. Beneficially, as the HSA source is recombinant, the matrix should not contain any measurable contaminants typically found in even doubly stripped serum.

SigMatrix Ultra has been successfully used in LC-MS/MS assays for clinically relevant concentrations of total testosterone (20-2000 pg/mL), estradiol, and estrone (2-1000 pg/mL). Calibrators prepared in SigMatrix Ultra showed good linearity ($r^2 > 0.97$) and no interference at the lowest calibrator concentrations for all analytes tested. Additionally, extracted blank SigMatrix Ultra spiked with analyte specific isotopically labelled internal standards showed no interferences above the lower limits of quantitation at the retention time of the respective analytes.

Precautions and Disclaimer

For R&D use only. Not for drug, household, or other uses. Normal precautions exercised in handling laboratory reagents should be followed.

Dispose of waste observing all local, state, provincial, or national regulations. Refer to Safety Data Sheet and product labeling for any updated risk, hazard, or safety information.

Component

The product contains ultrapure 2% recombinant human serum albumin in a PBS solution, pH 7.4.

Storage and Stability

SigMatrix Ultra should be stored at -25 °C to -10 °C but can undergo up to 3 freeze-thaw cycles, see Figure 1. Solutions prepared using this reagent should not be used beyond the expiration date on the original packaging. If buffer becomes cloudy or discolored, discontinue use and discard.

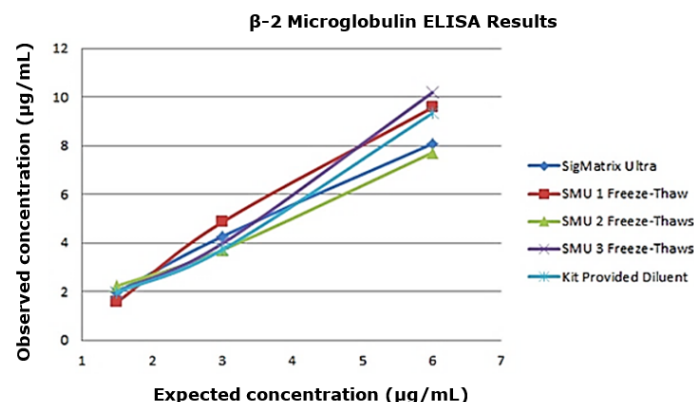


Figure 1. Comparison of different matrices and associated freeze-thaw stability using an ELISA Kit for β-2 Microglobulin (R&D Systems DBM200, Lot 338837) β-2M was spiked into the different matrices and sampled in duplicate.

Notice

We provide information and advice to our customers on application technologies and regulatory matters to the best of our knowledge and ability, but without obligation or liability. Existing laws and regulations are to be observed in all cases by our customers. This also applies in respect to any rights of third parties. Our information and advice do not relieve our customers of their own responsibility for checking the suitability of our products for the envisaged purpose.

The information in this document is subject to change without notice and should not be construed as a commitment by the manufacturing or selling entity, or an affiliate. We assume no responsibility for any errors that may appear in this document.

Technical Assistance

Visit the tech service page at SigmaAldrich.com/techservice.

Terms and Conditions of Sale

Warranty, use restrictions, and other conditions of sale may be found at SigmaAldrich.com/terms.

Contact Information

For the location of the office nearest you, go to SigmaAldrich.com/offices.

The life science business of Merck operates
as MilliporeSigma in the U.S. and Canada.

Merck and Sigma-Aldrich are trademarks of Merck or its affiliates. All other trademarks are the property of their respective owners. Detailed information on trademarks is available via publicly accessible resources.

