Product Information

SigMatrix Ultra Serum Diluent

Buffered Recombinant Human Serum Albumin

D5197

Storage Temperature: –25 °C to –10 °C

Preformulated buffer for use by diagnostic or clinical laboratories, or by manufacturers of diagnostic reagents or kits.

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 clinical diagnostic 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 (20–2,000 pg/mL), estradiol, and estrone (2–1,000 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.

Component

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

Precautions and Disclaimer

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.

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.

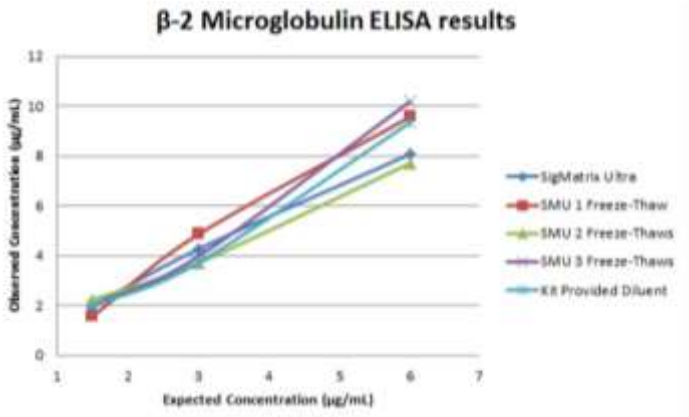

Figure 1. Comparison of different matrices and associated freeze-thaw stability using an IVD ELISA Kit for β-2 Microglobin (R&D Systems DBM200, Lot 338837) β-2M was spiked into the different matrices and sampled in duplicate.

Notice

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