# TELOS<sup>®</sup> PPT

# **Protein Precipitation Columns and Plates**

- Protein precipitation by filtration
- Efficient precipitation using solvent first method
- In situ protein precipitation no vortex mixing required
- No offline liquid handling steps
- Precipitate free filtrates
- 1ml columns and 96-well plates

TELOS<sup>®</sup> PPT Protein Precipitation Plates and Columns are designed for the clean-up of biological fluid samples, particularly plasma. Available in both 1ml columns and 96-well plates, the product is ideally suited to both high through sample preparation and variable and small sample numbers.

# Efficient and Reliable Protein Precipitation

The double fritted design includes proprietary and large porosity frits for rapid and trouble free protein precipitation. The proprietary frit holds up the precipitation solvent, acetonitrile, creating a "pool" for the plasma to be dispended into. The larger porosity frit prevents blocking, allowing reproducible collection of the subsequent filtrate. *See Figure 1*.

To allow reproducible precipitation from sample to sample, it is important the sample is dispensed directly into the acetonitrile with force.





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# **TELOS<sup>®</sup> PPT** Protein Precipitation Columns and Plates

# No Filtrate Breakthrough

Extensive testing of the TELOS PPT Product guarantees no acetonitrile or acetonitrile/plasma mixture breakthrough during the process. Only when the subsequent vacuum is applied will the filtrate pass into the collection vial or plate.

#### **No Offline Steps**

The complete precipitation process takes place in the column or well. TELOS PPT Columns and Plates remove the need for tedious off line liquid handling and centrifugation steps. The complete process occurs in situ.

## 96-well and 1ml Formats

TELOS PPT Protein Precipitation Products are available in both 96-well plates and 1ml columns. The 96-well plate is optimised for high throughput methods that require the microtitre plate format. For methods and applications that require single columns, or have small and varying sample numbers, use the 1ml column.

#### Acetonitrile to Plasma Ratio

The optimum ratio of acetonitrile to plasma is 4:1 v/v. This ensures complete precipitation occurs and the filtrate is precipitate free. If a reduced acetonitrile/ plasma ratio is used, complete precipitation my



Figure 1. Protein Precipitation Procedure using TELOS PPT Columns and Plates



Figure 2. Drug recoveries using TELOS PPT Protein Precipitation Plates

not occur, or will take place in the collection plate after filtration. Larger acetonitrile/plasma ratios will result in unnecessarily dilute samples and additional, or extended evaporation times.

## Plasma Sample Volumes

The minimum plasma sample which can be processed using the recommended procedure is 15µl. This requires 60µl acetonitrile, the minimum practical amount to form a "pool" at the bottom of the column or well. The maximum plasma volume is 200µl for 1ml columns and 400µl for the 96-well plate.

## High Reproducible Recoveries

Figure 2 highlights typical analyate recoveries using TELOS PPT Columns and Plates. Human plasma (100µl) was processed using the recommended TELOS PPT Method – see TELOS PPT Protein Precipitation Columns and Plates How to use Guide.

PART NUMBER	DESCRIPTION	PACK SIZE
960-0001-001T	TELOS PPT Protein Precipitation Columns, 1ml	100
960-0001-096P	TELOS PPT Protein Precipitation Plate	1

KLTD-1536-0915





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