

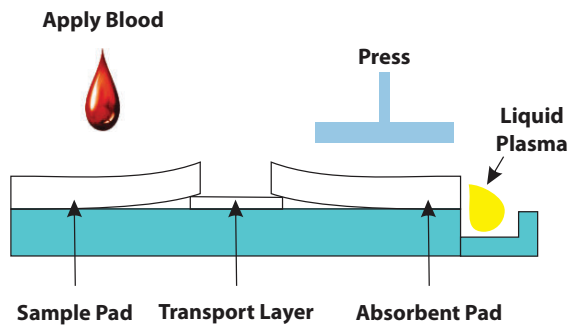
## Introduction

Many Point of Care (POC) instruments require free plasma for the diagnostic tests to be conducted. This necessitates the removal of red blood cells from whole blood sample. Although centrifugation technique is commonly used, it requires sample to be sent to the lab. Some devices separate RBC from the whole blood but do not provide free plasma as it remains in the separation matrix only.

Rapid Plasma Separation Device (RPSD) overcomes this problem and makes available plasma from few micro liters to hundreds of micro liters from whole blood in a few minutes for Biochemical, Immunological as well as Molecular Biology assays.

## Technology

**mdi** RPSD devices with Blood filters provide liquid plasma within 3-5 minutes. The Device has unique design where Blood is applied to a sample reservoir, the RBC are retained in the filter and plasma travels through a transport layer to an absorbent pad. When the plasma filled absorbent pad is pressed, liquid plasma is driven into plasma collection well from where it can be collected.



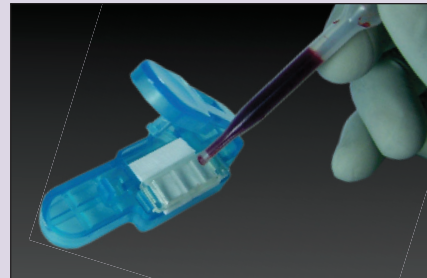
## Description of the Device

Whole blood is applied to a filter matrix that separates the RBC. The plasma collects at the distal end of the matrix where it is freed from the matrix by pressing the device.

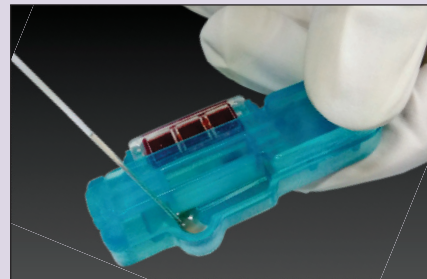
## Key Features

- The plasma is recovered in 3-5 minutes
- Different RPSD devices are available to recover rated amount of plasma as per requirement
- RPSD is designed to deliver more than rated amount of plasma at even up to 56% hematocrit

## Functioning of RPSD



Whole blood is applied to a filter matrix which separates the RBC.



The device is pressed to squeeze out free plasma at the distal end of the matrix. The freed plasma goes into the reservoir from where it is collected.

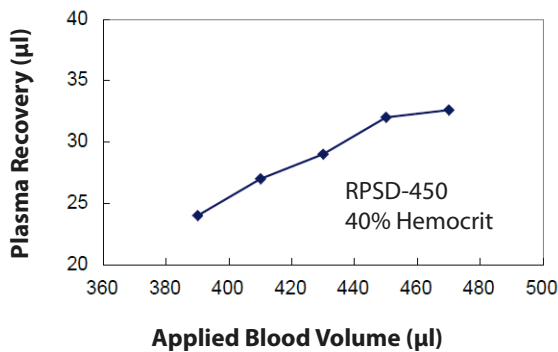
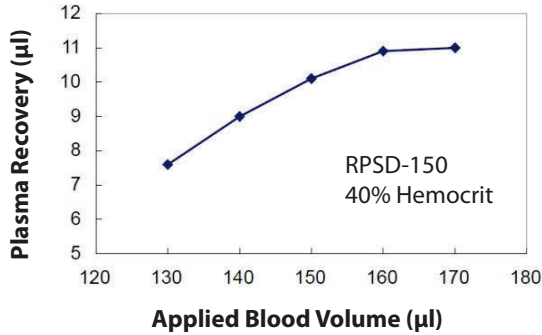
## Applications

The Rapid Plasma Separation technology is useful in following application

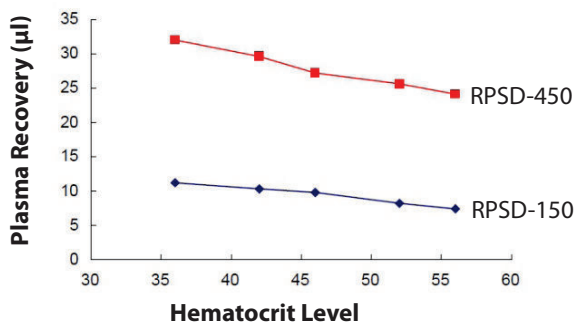
- For near patient testing where liquid plasma is required for the qualitative and quantitative assays
- For obtaining plasma for POC instruments and ambulances
- For testing of patients for admission to acute care medical wards
- For testing in remote areas where lab facilities are not available
- In resource limited settings when centrifuge and electricity are not easily available

## Performance Data

### Effect of Blood Volume on liquid plasma recovery



### Effect of Hematocrit Level on liquid plasma recovery



## Integration with POC instruments

Special RPSD Cartridges can be designed to fit with Point of Care instruments which can allow automatic plasma separation and usage without the need to centrifuge the blood.

## Guaranteed Performance

Type	Blood Applied	Minimum Recovered Plasma
RPSD-150	150 - 180 µl	>6 µl
RPSD-450	440 - 480 µl	>22 µl

## Types Available



RPSD-150



RPSD-450

Design of customized devices, and integration with different POC instruments can be done. Please contact us for assistance.

## Ordering Information

Kindly specify the type required and number of packs.

Type	Pack Size
RPSD-150	100
RPSD-450	100

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