

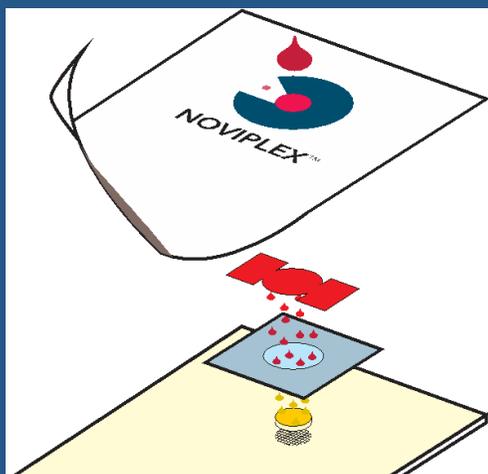
# NoviPLEX™ Plasma Prep Cards

The next generation in blood processing



Finally, a simple and easy method to prepare blood samples for analysis.

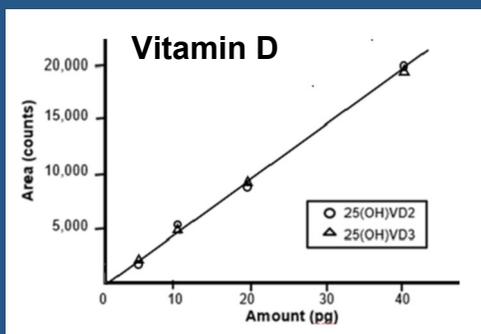
Collect blood samples anytime and anywhere!  
***Blood drops to dried plasma in just minutes.***



**Noviplex Plasma Prep Card** is a multi-layered card that distributes the blood, filters out the red blood cells and collects a defined volume of plasma

### Vitamin D Analysis

Transfer plasma disc to a vial, add extraction solvents and analyze by LC/MS. Recoveries are typically 80% or better and sensitivity is as low as a picogram on disc.

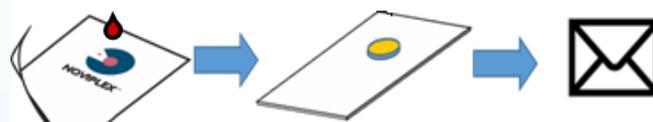


## Noviplex™ Plasma Prep Card

*Simplify the preparation of blood samples for analysis.*

Noviplex™ Plasma Prep Cards convert a drop or two of blood into plasma in just 3 minutes without centrifugation or any power source. Collect and process your blood specimen, *anytime and anywhere.*

The one-time use cards are ideal for specimen collection in remote regions and point-of-care facilities. Noviplex cards collect blood with the simplicity of dried blood spots with unique advantages. Unlike dried blood spot cards Noviplex cards produce a defined volume of plasma regardless of the amount of blood applied or the hematocrit. There is no spot punching required with Noviplex cards, just collect specimen, then mail.

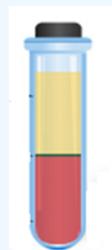


*Collect a constant volume of plasma regardless of the blood volume applied or the hematocrit .*



Whole Blood, 30 µL Applied	Free-flowing Blood, one drop
<b>2.52 ± 0.03 µL</b>	<b>2.57 ± 0.02 µL</b>

High hematocrit levels increase the viscosity of blood, but do not affect the volume of plasma collected with a Noviplex card.

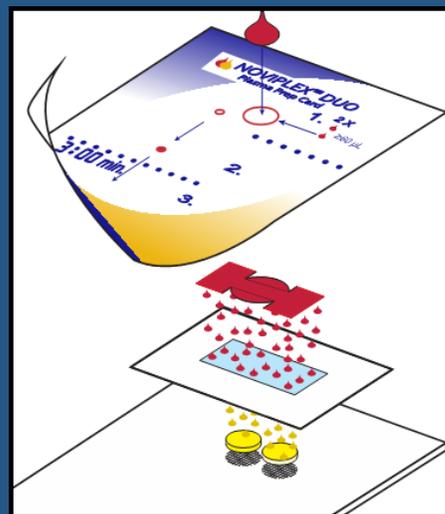
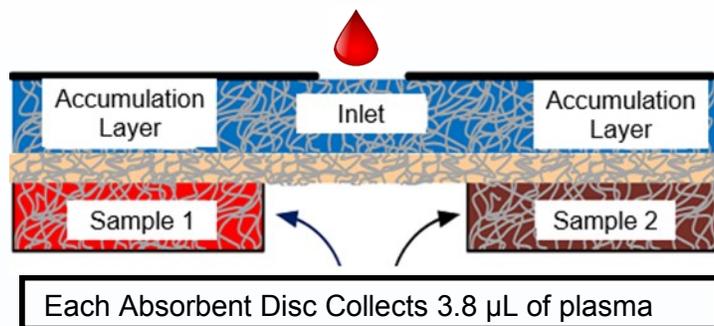


**Hematocrit:**  
red blood cell volume,  
typically, 41%

Hematocrit	Plasma Volume
<b>20%</b>	<b>2.50 ± 0.02 µL</b>
<b>41%</b>	<b>2.57 ± 0.02 µL</b>
<b>71%</b>	<b>2.48 ± 0.08 µL</b>

## Noviplex Duo divides a blood sample without a pipette!

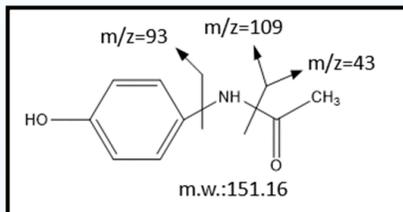
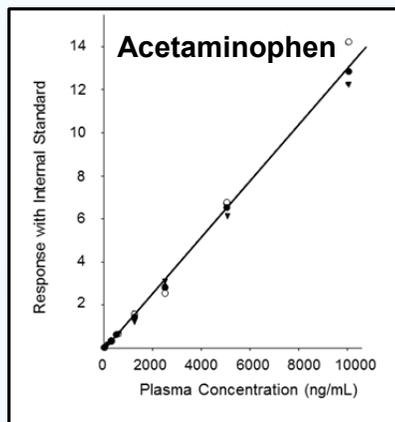
The Duo plasma card splits the blood deposited in the center of the card in two directions. Both collection pads absorb the same amount of plasma from the accumulation sector.



**Noviplex Duo Plasma Card** quickly removes blood cells from two drops of blood and collects two equivalent plasma samples.

## Typical Noviplex Plasma Card Applications

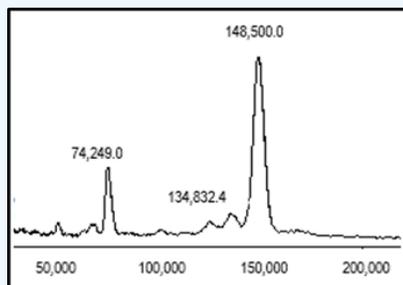
Tandem LC/MS is ideal for the high-sensitivity analysis of many drugs and metabolites. Simply place the sample disc in extraction solvent and inject the recovered plasma analytes.



**Acetaminophen Analysis** with the Noviplex plasma card. Triplicate injections monitoring the 151 to 109 m/z transition.

## MALDI Analysis of Proteins Directly on Plasma Disc

Just add matrix to the plasma disc and let it dry. Insert the plasma disc into the sample tray for the MALDI-TOF instrument and collect spectra.



Blood Volume Applied	Left Disc	Right Disc
60 µL	3.69 µL	3.78 µL
75 µL	3.89 µL	3.80 µL
90 µL	3.79 µL	3.79 µL

**Noviplex Duo Plasma Card** collects two reproducible aliquots of plasma regardless of blood volume applied. Less than 5% variation in plasma collected.

	Duo (left)	Duo (right)
Donor A (ng/mL)	28.99	27.53

**Vitamin D analysis with the Duo by LC/MS is sensitive, accurate and precise using the isotope dilution method.**

**Noviplex Cards are ideal for analysis by mass spectrometry which can quantify picogram amounts of compounds on the plasma disc.**

Compounds can be extracted for injection into a mass spectrometer or analyzed directly by a solid surface. The Noviplex cards are compatible with:

### MALDI/TOF Systems

Matrix Assisted Laser Desorption Ionization with a Time-of-Flight mass spectrometer. Ideal for analysis of intact proteins, peptides, and small molecules.



### Tandem LC/MS Systems

Triple Quadrupole based mass spectrometers that achieve high sensitivity by monitoring specific ion transitions.



**Noviplex Duo Cards are ideal for analysis of both organic and inorganic species.**

Sample preparation for metal analysis requires strong acid that degrades organic compounds. But with the Duo, one disc goes for inorganic, the other for organic analysis.

### ICP/MS Systems

Inductively Coupled Plasma systems convert molecules to their elemental state. Ideal for the analysis of both trace and common metal ions in plasma samples.



Na		K		Ca		Vitamin D	
Novi-Plex Data	Lab Data						
143 mM	141 mM	5.5 mM	5.4 mM	2.5 mM	2.4 mM	13.7 ng/mL	12.4 ng/mL

## Simplifying Blood Preparation for Analysis

Contact Novilytic at [info@novilytic.com](mailto:info@novilytic.com) for a free application guide or price quote

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