

# Introducing the new fluidityone-w serum

## Fight COVID-19 via accurate immune response assessment in minimally diluted serum

We have developed a novel in-solution immunoassay platform on the Fluidity One-W Serum that allows researchers to characterize and quantify antigen-antibody interactions directly in minimally diluted serum.

### Advantages of the Fluidity One-W Serum

The ability to **quantify both affinity and concentration** empowers researchers with a deeper and better understanding of the *in vivo* immune response compared to titer alone.

In-solution (as opposed to on-surface) characterization allows **serum samples** to be characterized with **minimal dilution**.

### Take a closer look Fluidity One-W Serum highlights

- Characterization of protein interactions in solution using Microfluidic Diffusional Sizing (MDS)
- Ability to measure in complex backgrounds such as minimally diluted serum and cell lysate
- No binding artifacts or non-specific binding, no surface-constraints
- Independent determination of antibody concentration and affinity for a comprehensive immune response assessment
- Easy-to-use interface and consumable management
- Disposable single use chips and contained waste minimize risk of cross contamination



fluidityone-w  
serum

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# Why measuring affinity in serum is important



Scientists, clinicians & the biopharma industries across the world are trying to understand how proteins & their interactions effect sickness and health.

The ability to accurately assess the immune response is crucial to better understand infectious diseases like COVID-19.



Traditional immunoassays such as ELISAs offer only an incomplete picture of the immune response against SARS-CoV-2 as they combine affinity & concentration into a single, less-precise measure known as titer.

Titers cannot distinguish between large numbers of weak-binding antibodies and small numbers of strong-binding antibodies.



Understanding antibody responses on the basis of quantitative fingerprints of affinity & concentration could have major implications for plasma transfer treatments, vaccine and therapeutic development, and the ongoing monitoring of immunity.



## fluidity one-w serum

### Fluidity One-W Serum specifications

Sizing	Range (hydrodynamic radius)	0.7 – 20 nm
	Range (molecular weight)	0.5 kDa – 14 MDa
	Accuracy	± 10%
	Precision	CV < 10%
	Sensitivity	1 nM Alexa Fluor™ 647
Operational	Volume per measurement	5 µL
	Run time	Small proteins & peptides – 8 mins Large proteins – 14 mins
	Buffer compatibility	Compatible with pure buffer or crude lysates
	Runs per reagent cartridge	96
	Dimensions (D x W x H; cm)	40 x 40 x 43
	Detection	Fluorescence
	Label compatibility	Alexa Fluor™ 647 & equivalents

Research Use Only

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