

MassGlass™ KV Sample Carrier

Refeyn's MassGlass KV sample carrier is an essential tool for rapid, consistent, and reproducible characterization of viral vectors, virus-like particles and lipid nanoparticles. Designed for use in a controlled environment, it enables the safe handling of BSL-2 samples, making it an indispensable consumable for your Karitro™ macro mass photometer.

Vector characterization

Characterizing adenovirus vectors (AdV) virus-like particles (VLPs) and lipid nanoparticles (LNPs) is crucial for optimizing workflows for cell and gene therapies, as well as vaccine development, ensuring the safety and efficacy of drug delivery platforms. Refeyn's new instrument, the KaritroMP, employs macro mass photometry for fast, simple, and qualitative vector analysis. With the ability to quickly assess the purity and stability of produced viruses and particles before making further decisions, it is perfectly suited to compare different production/purification methods and batch-to-batch variations.

The MassGlass KV sample carrier

The MassGlass KV sample carrier is a tailored consumable, designed exclusively for use with the KaritroMP instrument. It consists of three essential components: A sample carrier slide, a 14-well cassette and a lid (see Fig. 1).

The design of the MassGlass KV sample carrier allows for the measurement of multiple samples (13 samples plus a calibrant), generating rapid, consistent and reproducible results.

Suitable for biosafety level 2 (BSL-2) samples

The sample carrier has been engineered to facilitate the safe handling of BSL-2 samples in a controlled environment, such as a biosafety hood. Once the sample has been diluted to the appropriate concentration ($10^8 - 10^9$ particles/mL) and manually pipetted into the wells, the carrier is closed with a lid, allowing the sample carrier to be safely removed from the biosafety hood and placed on the KaritroMP instrument.

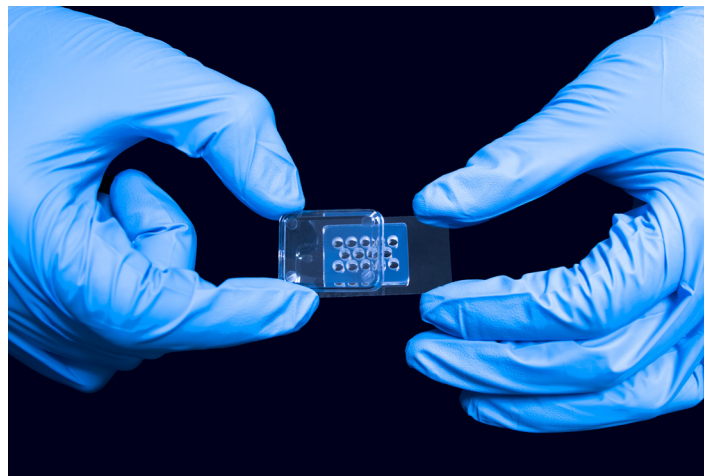


Fig. 1 Components of the MassGlass KV sample carrier. This consumable is composed of a sample carrier slide, a 14-well cassette and a lid.

Automatic workflow

The sample carrier has been designed for use in an automatic workflow:

1. The user manually loads the calibrant and the samples into the cassette wells.
2. The user sets up the instrument/measurement protocol.
3. The KaritroMP acquisition software measures all the loaded samples, automatically moving between wells.

This saves the operator time in front of the instrument and adds simplicity to the workflow. Once the samples are loaded and the instrument is set up, the user can start the acquisition and walk away.

Product specifications

Components	A sample carrier slide, a 14-well cassette and a lid	Sample volume	5 μ L
Storage	Room temperature, in a clean environment	Number of samples	Max 13 (plus a calibrant)
Optimal sample concentration	$10^8 - 10^9$ particles/mL	Compatibility	KaritroMP instruments only
		Particles targeted	AdV, LVV
		Shelf life	4 months

How to buy: MassGlass KV is available as part of Sample Preparation Kits (**MP-CON-21026**).

Related products

To facilitate slide placement, Refeyn provides Alignment Kits for the KaritroMP (**MP-CON-21021**). A custom calibrant for the KaritroMP, SizeFERENCE™ (**MP-CON-41030**) is also available.

MassGlass KV and SizeFERENCE are unique consumables designed exclusively for use with the KaritroMP and are not compatible with any other Refeyn instruments. Additionally, the KaritroMP is not compatible with other Refeyn consumables.

For more information, visit the [Refeyn website](#) or send an inquiry to orders@refeyn.com.