# **qEV CONCENTRATION KIT**



### INTENDED USE

The qEV Concentration Kit is an all-in-one system for concentrating intact EVs isolated using qEV Isolation Columns in elution volumes of 600  $\mu$ L to 20.0 mL. The kit does not require special equipment, does not use precipitation reagents or protease treatments, and the concentrated EVs can be used for downstream applications including qPCR, microarray analysis, and small RNA sequencing (RNA-seq), western blots or mass spectrometry. For instructions on downstream protocols to use EVs concentrated with Nanotrap® Extracellular Vesicle Particles visit: https://support.izon.com/ qev-concentration-kit-user-manual.

The qEV Concentration Kit is <u>NOT</u> suitable for use in conjunction with RNA extraction kits that use isopropanol in the lysis buffer. Please ensure any RNA extraction kit used downstream is compatible with this kit before use.

### STORAGE

Keep containers used to store the Nanotrap® Extracellular Vesicle Particles tightly closed at 4 °C. **DO NOT FREEZE**.

#### Waste Disposal Methods:

- Offer surplus solution to a licensed disposal company.
- Rinsed containers may be disposed of in standard solid waste stream.

Dispose of the following potentially contaminated materials in accordance with laboratory local, regional, and national regulations:

- Biological Samples
- Reagents
- Used reaction vessels or other consumables that may be contaminated



For full user manual please visit: https://support.izon.com/gev-concentration-kit-user-manual

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## MANUAL OPERATING INSTRUCTIONS

#### Notes Prior to Use

- All centrifugation steps are performed at room temperature.
- Ensure that centrifuge tubes used can withstand the centrifugal forces required.
- Ensure that all solutions are at room temperature prior to use.

### EV concentration using Nanotrap® EV Particles after qEV separation/ purification

- 1 Pool purified collection volume of interest.
- 2 The volume of Nanotrap® EV Particles required to concentrate EV-containing samples will depend on the volume of sample (See Table 1). Add the appropriate volume to the pooled purified collection volume.

qEV COLUMN USED FOR PURIFICATION	PURIFIED COLLECTION VOLUME (PCV) (mL)	VOLUME OF NANOTRAP <sup>®</sup> EV CAPTURE PARTICLES (µL)
qEVsingle	0.6-0.8	50
qEVoriginal - Legacy	1.5-3.0	100
qEVoriginal - Gen 2	1.6-2.8	100
qEV1	2.8-4.2	100
qEV2	6.0-8.0	150
qEV10	10-20	200

Table 1: Volume of Nanotrap® EV Particles added to specific volumes of EV-containing samples.

- 3  $\$  Incubate the mixture with rotation for one hour for efficient and specific binding of EVs to Nanotrap® EV particles.
- 4 Centrifuge the mixture at 16,800 RCF for 10 minutes to pellet the EVs bound to Nanotrap® EV Particles.
- 5 Remove the supernatant being careful not to disturb the pellet of EVs.
- 6 Resuspend the pellet in the desired buffer volume to prepare for downstream processing.

## TROUBLESHOOTING

If you disturb the pellet, the sample may need to be re-centrifuged.

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