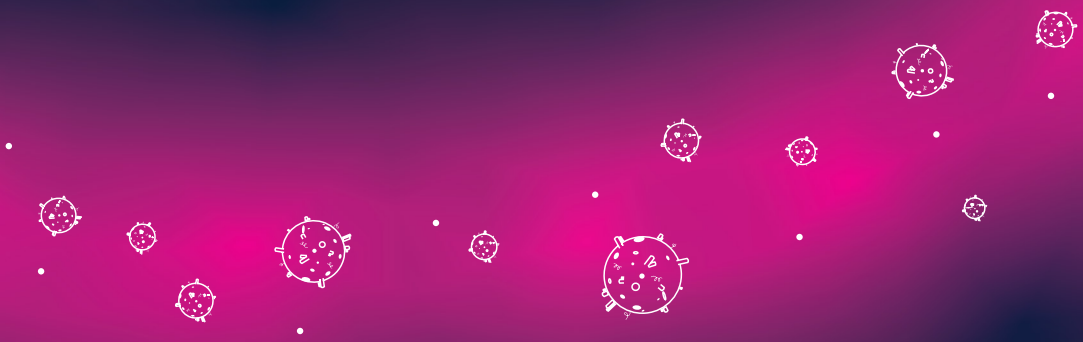
qEV ISOLATION

Scaling EV purification from research to production



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PURIFY PARTICLES AT SCALE WITH qEV ISOLATION

From microlitres to kilolitres

Pure & gentle

Harness size exclusion chromatography-based qEV columns, supported by automation, to purify intact particles efficiently without subjecting them to high forces.

Scalable

A standardisable isolation method that can be adapted to your current stage and grows with your progress. Average isolation time: 15 minutes (column-dependent).

Versatile

Purify particles for fundamental research through to diagnostic development or therapeutic production.

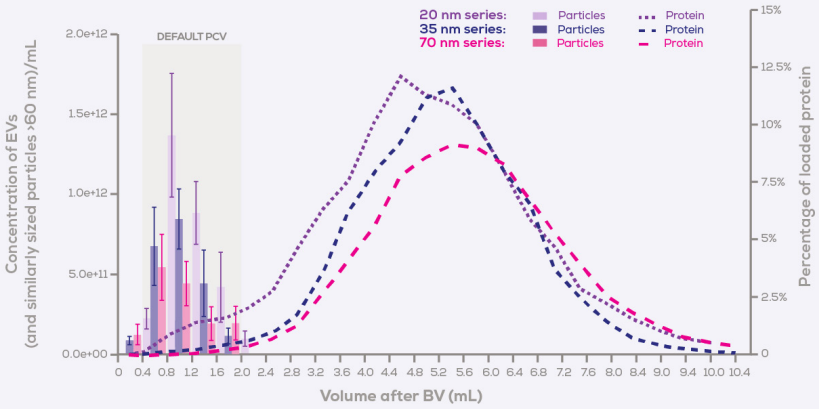
The qEV Isolation platform is used by:

- Academic and industry researchers working with EVs, as well as viruses, liposomes, other lipid nanoparticles and more
- Developers of EV-based therapeutics and cosmetics
- EV-based diagnostics companies

qEV Isolation Overview

Collect highly purified isolates

The figure below demonstrates the efficient separation capabilities of qEV columns.



0.5 mL of human plasma was loaded onto qEVoriginal columns. Particle concentration (mean ± standard error) was measured with the Exoid, while protein concentration (mean) was determined using a bicinchoninic acid assay (n=3 per column series). BV: Buffer Volume; Default PCV: Default Purified Collection Volume when using the Automatic Fraction Collector.

Beyond SEC, the qEV Isolation platform now encompasses:

- A wider range of "off-the-shelf" and customised qEV columns
- qEV Automation: Maximise efficiency and reproducibility
- qEV Services: Accelerate development with specialised support

qEV COLUMNS: FOR SAMPLE VOLUMES FROM 150 µL TO 100 mL AND BEYOND

Choose from our off-the-shelf range...

...or consult with our team about custom solutions for industrial-scale processing or specific requirements.

GMP-READY ON REQUEST:

Each batch of GMP-ready qEV columns is subject to bioburden and endotoxin testing, with the results compared against defined criteria for batch release.

Download the Regulatory Support File

Find your qEV series match

Each qEV series is named after the resin pore size used in its column range, resulting in purified isolates with slightly different characteristics.

Compare the qEV series in more detail

	20 nm series Maximise particle recovery	35 nm series The middle ground	70 nm series Maximise EV isolate purity
Common applications	Suited to the study of exomeres & supermeres, small EVs, adenoviruses and other small viruses, EV-only biomarkers	Popular in the study of EVs, especially cell culture-derived EVs	Popular in the study of EV-omics, plasma EV biomarkers, functional studies to establish EV-specific effects
Purity of isolate	✓	✓✓	✓✓✓
Lipoprotein removal	✓	✓	✓✓
Particle recovery	✓✓	✓	✓
Suited to the recovery of sub 50 nm particles?	✓✓	✓✓	x
Optimum isolation size range	20 nm – 100 nm	35 nm – 400 nm	70 nm – 2000 nm
Size range where >50% of input is isolated	20 nm – 4000 nm	25 nm – 2000 nm	70 nm – 2000 nm
Did you know...?	The 20 nm series is suited to the recovery of sub 50 nm particles.	ApoA1 levels in plasma EV isolates measured by ELISA were at or below detection limits across all qEV series.	ApoB removal from plasma by 70 nm qEV columns has been shown to be around 99%!

SCALE EXTRACELLULAR VESICLE ISOLATION FOR FUNDAMENTAL RESEARCH

Automate EV isolation with the Automatic Fraction Collector (AFC)

Standardised precision

A scalable and reproducible way forward for EV research and biomarker development. The AFC ensures precise collection by measuring fluid by weight.

Customised separation

Programme the AFC to collect your desired volume. Compatible with the qEVsingle, qEVoriginal, qEV1, qEV2, and qEV10.

High purity

Separate EVs from soluble protein to a high degree of purity.

Learn more about the AFC

Efficient and easy to use

LED prompts help you track progress, while the RFID tag reader identifies the loaded qEV column and its remaining uses. The rotational carousel advances collection tubes as the target weight is reached.

Fits easily into any lab

Cost-effective and compact. Place multiple AFCs side-by-side for parallel processing. Weight 1.2 kg; dimensions 25 x 30 x 40 cm (W x D X H).

Greater flexibility

Customise the buffer volume and purified collection volume.

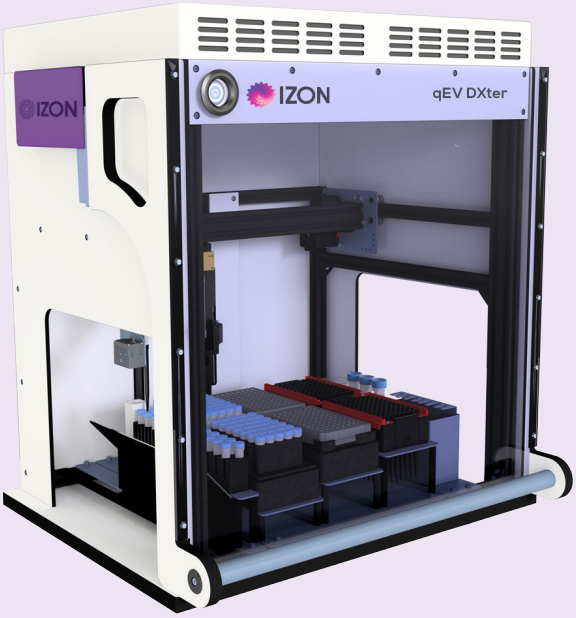
Learn about qEV Concentration Kits to supplement your qEV Isolation workflow

Scale Extracellular Vesicle Isolation for EV Diagnostics with qEV DXter

Boost scalability with a robotic liquid handling system for qEV columns

Developed with growing EV diagnostic developers in mind, the qEV DXter enables simultaneous EV isolation from 24 samples with the qEVsingle, or from 12 samples with the qEVoriginal.

Other iterations and additional sample processing steps are customisable on request. Available for order now.



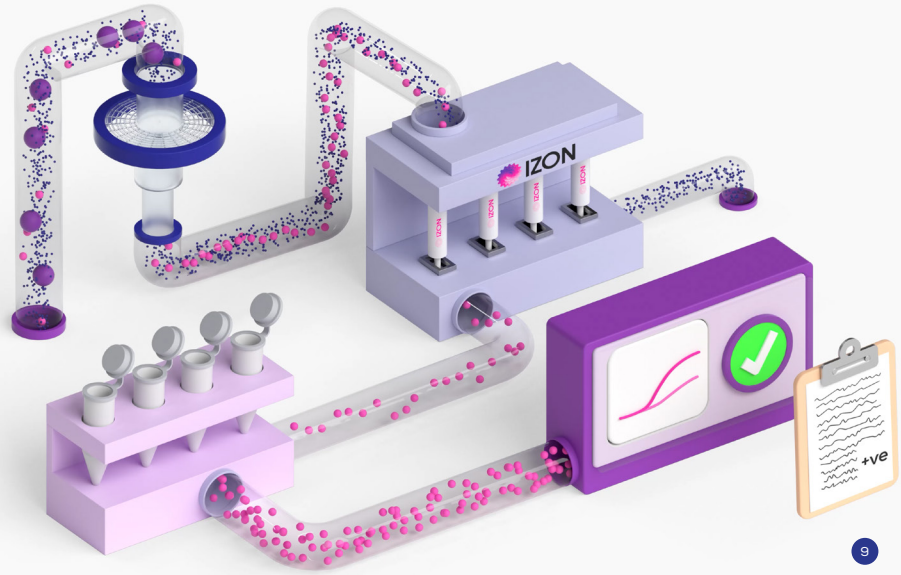
Learn more about qEV DXter

Get Clinic-Ready with qEV PurePath for Diagnostics

A partnership to accelerate the scale-up of your EV isolation workflow

- Reduce time to market with customised development and access to isolation expertise
- Take advantage of improved cost-effectiveness as you scale; the unit cost for qEV columns decreases significantly for bulk orders
- Prepare for the clinic with our expanding qEV Automation technology

PurePath for Diagnostics



Scale Extracellular Vesicle Isolation for EV Therapeutics

Establish your entire bioprocessing workflow with qEV Isolation

- Streamline with automated chromatography systems for qEV columns
- Access customised qEV columns to support large-scale processing
- Build sample concentration into your workflow with our tangential flow filtration systems

Refine isolation protocols through high-resolution, single-particle characterisation.

The Exoid

qEV Zenco:

Your automated chromatography system for purifying samples from the qEV2, qEV10, qEV100 and larger customised columns.

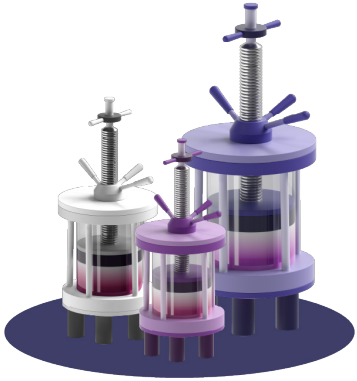
qEV Automation

Process Development and Sample Processing

Accelerate and outsource your EV isolation workflow development

Get access to:

- Expertise in large-scale sample clarification, concentration, and EV isolation
- Customised qEV columns with unmatched purity
- Scalable qEV Automation tailored to various scales of operation



Outsource sample processing for ~6 L through to industrial-scale production.

Bioprocessing Services

Access long-term support from our specialists so that you can meet the challenges of EV therapeutics development head on.

qEV PurePath for Therapeutics

TO STREAMLINE YOUR ISOLATION WORKFLOW, VISIT:

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