

SOLE SOURCE JUSTIFICATION

PURCHASE AND SUPPLY OF IZON SCIENCE'S qEV GEN 2 COLUMNS



OVERVIEW

Izon Science Limited is the sole manufacturer of qEV Gen 2 Columns, which are Size Exclusion Chromatography (SEC)-based columns made using a high-performance resin specifically developed for the isolation of extracellular vesicles (EVs).

Each qEV Gen 2 column* is fitted with a unique RFID tag which allows the column to be used with Izon's Automatic Fraction Collector, an instrument that automates the isolation of EVs from contaminating soluble protein in biofluids and cell culture media. Only columns manufactured by Izon Science can be used with the Automatic Fraction Collector.

qEV Gen 2 Columns are available in six sizes, and each size comes in two types: the 35 nm Series and the 70 nm Series. Each of the two types differ in the particle size distribution, amount of lipoprotein recovered, and the amount of protein recovered within EV-containing volumes. The column dimensions and buffer volume of each column type has been optimised to maximise EV isolation from a specified optimal sample loading volume.

*Excluding the qEV100/35 nm and qEV100/70 nm

SPECIFICATIONS

Sample Volume

A range of volumes could be required depending on the qEV Gen 2 column used, and the extent to which samples are concentrated prior to loading on the column (if applicable). The qEV Gen 2 column range includes columns optimised for sample loading volumes ranging from 150 μ L to 100 mL.

qEV Gen 2 Column Range

The qEV Gen 2 range is comprised of the following columns (optimal sample loading volume in brackets), each available in the 35 nm and 70 nm Series:

- ▶ qEVsingle (150 μ L)
- ▶ qEVoriginal (500 μ L)
- ▶ qEV1 (1 mL)
- ▶ qEV2 (2 mL)
- ▶ qEV10 (10 mL)
- ▶ qEV100 (100 mL)

Sample Types

qEV Gen 2 columns are designed to isolate and purify vesicles from cell culture media and most biofluids including serum, plasma, urine, saliva, milk, and cerebrospinal fluid.

Running Buffer

- ▶ A wide range of pH-stabilised solutions can be used, as long as they are filtered and degassed prior to use. These include PBS, HEPES, MES, KCl, and Low Protein Growth Medium.
- ▶ Molarity: 130-500 mM

User Manuals and Supporting Documentation

A Quick Start Guide is provided in the box that the columns are supplied in. The User Manual and other supporting documentation can be found online at support.izon.com

Expiry

qEV Gen 2 columns have a 12-month expiry from the date of manufacture.