EVSecond L 70

## Rapid, High purity, Useful

Exosome Purification Column

Recent studies have reported significant roles of extracellular vesicle "Exosome" in development and progression of various diseases including cancer metastasis. Therefore exosomes are considered as attractive targets for biomarkers and drug development. However, it remains difficult to isolate high-purity exosomes from biological fluids such as serum.

EVSecond is a size exclusion chromatography open column optimized for effective purification of exosomes. Highly-purified exosomes can be easily collected from serum, plasma, or cell culture supernatant.

EVSecond L70 is a better version of product which the purification can be done at room temperature.

EVSecond

EVSecond L70

Features

· Simple gravity-flow handling without ultracentrifugation.

·EVSecond-purified exosomes possess efficient purity for comprehensive miRNA, proteome, and metabolome analysis.

· Exosomes are gently eluted in PBS without structural damage, allowing re-administration experiments of collected exosomes to cells or animals.

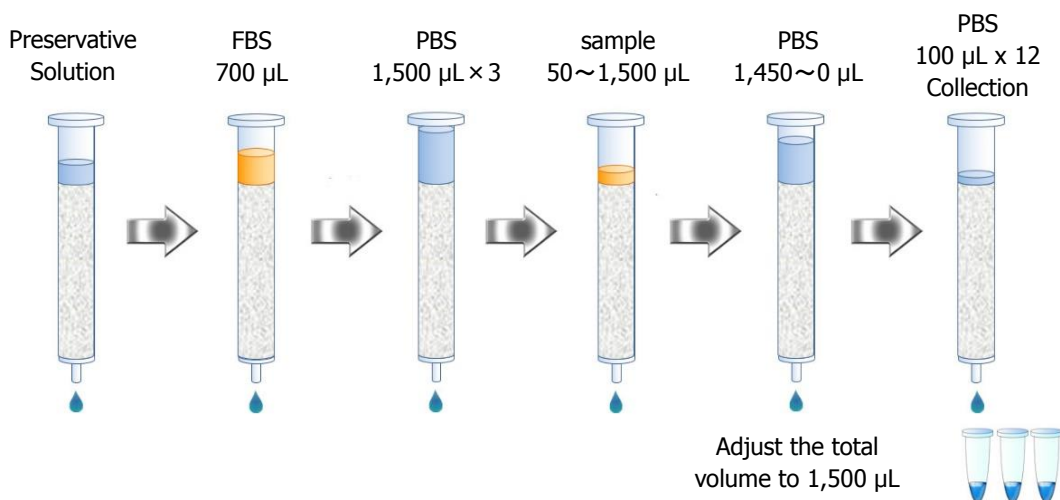·EVSecond L70 can used at room temperature and the preparation of column is now much easier.
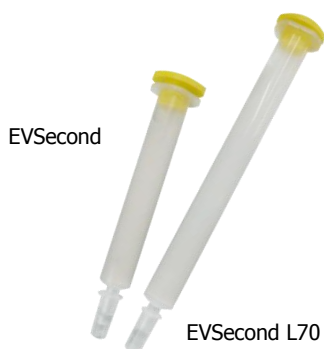
Specification

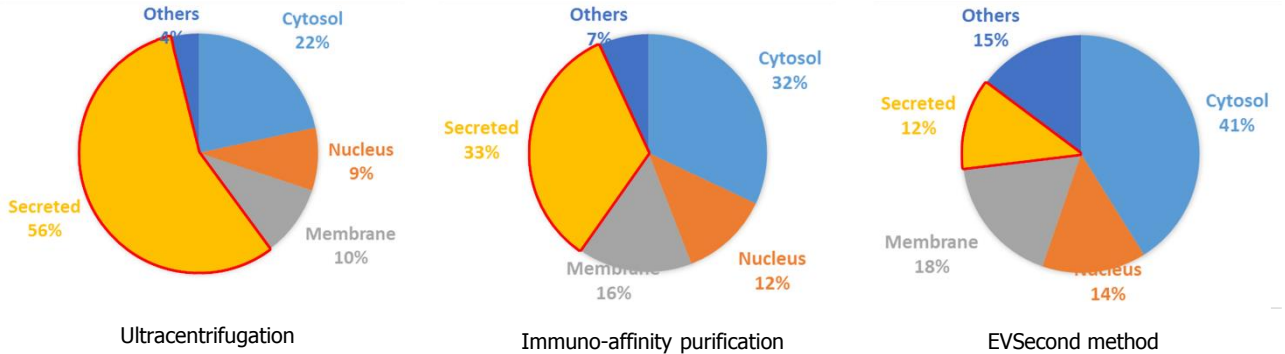|	NEW EVSecond L70	EVSecond
Full length	110 mm	75 mm
Packing bed length	70 mm	50 mm
Storing	In a refrigerator at 4 ℃	In a refrigerator at 4 ℃
Operation temperature	Room temperature	at 4 ℃
Column preparation	Room temperature Several minutes	at 4 ℃ Several hours
Sample volume	50～1,500 µL	50～700 µL

【 Operation flow 】

Gravity-flow is applied to each step.

* Exosome-containing fractions can be identified by western blotting or ELISA experiments detecting tetraspanins (CD9, CD63, CD81, etc.)

| Preservative Solution	FBS 700 µL	PBS 1,500 µL × 3	sample 50～1,500 µL	PBS 1,450～0 µL	PBS 100 µL x 12 Collection

Adjust the total volume to 1,500 µL

【 Advantages over traditional procedures 】

We compared some purified methods. We analyzed purified exosome using each method in LC/MS, and showed the subcellular localizations of identified proteins. EVSecond provided much higher purification efficiency with less free secreted proteins compared to other existing methods.

Ultracentrifugation

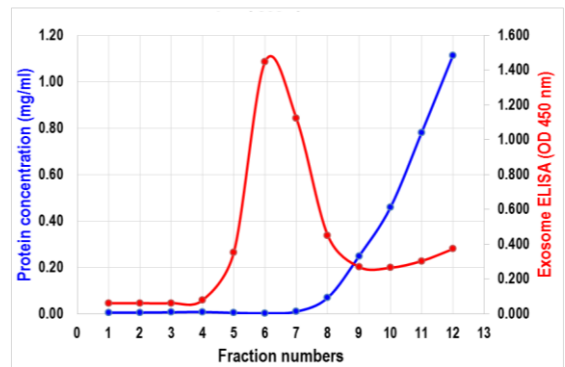

Immuno-affinity purification

EVSecond method

【 Purification of exosomes from human serum 】

Like EVSecond, EVSecond L70 can clearly separate exosomes from serum free proteins.
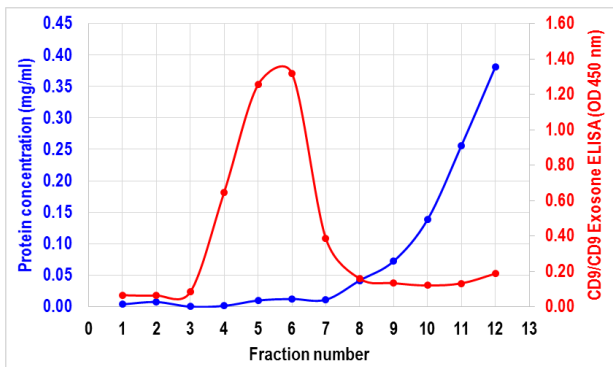
EVSecond L70

EVSecond

Isolating exosomes from 200 µL of human serum
(100 µl / fraction)
Red line: CD9-CD9 exosome sandwich ELISA (detecting exosomes)
Blue line: Bradford assay (detecting serum free proteins)
Data provided by Dr. Koji Ueda.

【 Ordering Information 】

Description		Quantity	Cat.No.
EVSecond L70	NEW	10 pcs	5010-21395
EVSecond		10 pcs	5010-21390
		25 pcs	5010-21392

EVSecond was developed based on the cooperation from Dr. Koji Ueda from Japanese foundation for cancer research.
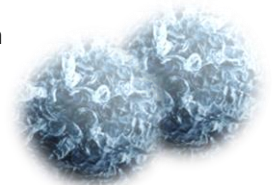
【 GL-SPE EXO Fraction Rack 】

This is a fraction rack designed for using EVSecond L70 or EVSecond, which offers smooth column handling and fractionation.

① Column hanger

② Collection tube racks
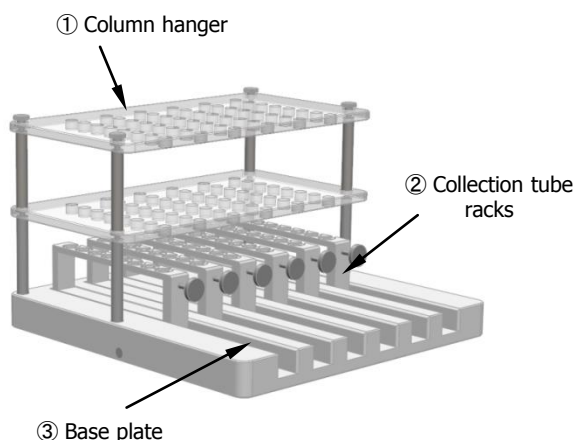
③ Base plate

①Column hanger
　Maxium 6 columns can be installed.

②Collection tube racks
　Maximum 8 collection tubes（1,5 mL or 2 mL）can be set.
　The collection tube can be switched by pulling the lever.

③Base plate
　Maximum 6 collection tube racks can be set.

Demension（for EVSecond L70）：300(W)×300(D)×189(H) mm

Demension（for EVSecond）：300(W)×300(D)×150(H) mm

This rack can use both EVSecond L70 and EVSecond by changing column hanger and stand.

For EVSecond L70

For EVSecond

【 Ordering Information 】

Description	Quantity	Cat.No.
GL-SPE EXO Fraction Rack	1 Set	5010-50450

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