

EVs360™ Multi-Omics Kit

QUICK GUIDE • BENCH-SIDE WORKFLOW

1 Choose your setup

Kit contents

Component	Store
Magnetic Beads L1	2–8°C
Solution A	RT
Wash Buffer	RT

- One reaction processes 1 mL plasma/serum or 5 mL cell culture media.

Recommended inputs

Sample	Input	Beads L1	Sol. A	Tube
Plasma/serum	0.5 mL	0.5 mL (5 mg)	1.25 mL	2 mL
Plasma/serum	1 mL	1 mL (10 mg)	2.5 mL	5 mL
Plasma/serum	2 mL	1.5 mL (15 mg)	2.7 mL	5 mL
Cell culture	5 mL	1 mL (10 mg)	Skip	5 mL

CRITICAL BRANCH Use Solution A for plasma/serum. Skip Solution A for cell culture media.

2 Prepare the sample

Plasma / serum

- Thaw completely at 37°C for 5–10 min, or overnight at 4°C.
- Invert gently to homogenize.
- Optional: centrifuge at 500 × g for 5 min; transfer the supernatant.

RNA WORKFLOW Add RNase inhibitor to 320 U/mL final. Incubate 10 min at room temperature before binding.

Cell culture media

- 300 × g for 10 min — remove cells.
- 2,000 × g for 10 min — remove debris.
- Keep prepared media on ice.

3 Capture EVs

1 PREP BEADS

- Vortex beads thoroughly.
- Transfer the selected bead volume to a low-binding tube.
- Magnetize 15–30 sec; remove storage buffer completely.

2 CONDITION

- Plasma/serum: add Solution A; invert 5–10×; rotate 3–5 min at medium speed.

CELL CULTURE Skip this step.

4 Complete capture

3 ADD SAMPLE & MIX

- Plasma/serum: add sample to conditioned beads.
- Cell culture: add media directly to beads from Step 1.
- Invert gently 5–10×.

4 INCUBATE

- Plasma/serum — Protein: 5 min; RNA: 15 min; DNA: 30 min.
- Cell culture media: 15 min.
- Rotate at medium speed.

5 CAPTURE & COLLECT

- Place on magnetic rack.
- Carefully remove supernatant without disturbing beads.
- Optional: save supernatant at –80°C for residual analysis.
- Retain EV-bound beads for downstream use.

5 Continue downstream

EV DNA or RNA

- See the supplemental EV DNA/RNA protocol.

EV Protein

- See the supplemental EV protein protocol.