

Product Information

F-NTA Tetraspanin EV Detection Kit 520

Product Details

Product Number:	700382
Size:	750 tests + 250 IgG tests
Reactivity:	Human, Baboon, Cynomolgus monkey, Human, Non-human primates
Isotype:	Mouse IgG1 kappa
Excitation/Emission:	562nm/584nm
Clonality:	Monoclonal
Storage conditions:	4°C, protected from light

Experimental Protocol

- Dilute 1µl of each of the three CD antibodies (CD9/CD63/CD81) in 27µl nanoparticle free phosphate buffered saline (PBS). This predilution can be used for up to 30 tests.
- For IgG control dilute 1µl in 9µl nanoparticle free phosphate buffered saline (PBS). This predilution can be used for up to 10 tests.
- Pipette 1-9µl EV sample (see table below) with a concentration of 10^{10} - 10^{11} EVs/ml in a 1.5ml reaction tube.
- Add 1µl of the prediluted antibody mix or IgG control and fill the volume up to 10µl using PBS.
- Store for 60min at room temperature in the dark.
- Fill up to 1ml total volume using PBS.
- Analyze the sample with a ZetaView® using the 520nm laser.

EV concentration (particles/ml)	EV sample volume (µl)	Final dilution factor (for use in ZetaView® software)
$1,5 \times 10^{11}$	1	1000
$1,0 \times 10^{11}$	1,5	666
$7,5 \times 10^{10}$	2	500
$5,0 \times 10^{10}$	3	333
$3,8 \times 10^{10}$	4	250
$3,0 \times 10^{10}$	5	200
$2,5 \times 10^{10}$	6	166
$2,1 \times 10^{10}$	7	143
$1,9 \times 10^{10}$	8	125
$1,7 \times 10^{10}$	9	111

Concentration $>2,0 \times 10^{11}$: please predilute sample

Concentration $<5,0 \times 10^9$: please increase sample volume and incubation time (see trouble shooting)

Trouble shooting

Number of particles/frame is too low:

- Increase the volume of EV sample to be stained. In case the volume needs to be increased above 20µl, the incubation time should be increased to 4h.
- Check protein concentration: concentrations higher than 30mg/ml might affect staining efficiency negatively.

Particles are visible in the buffer only control:

- Centrifuge antibody at 17.000g for 10min and use the supernatant.

Measurement settings

Size Distribution Video: Sample Parameters

Experiment ID: 20250304_0032 File Name Custom Entry: ParticleMetrix_Exosomes

Path - <please use the browse button to change the storage folder>
Z:\Project_A\20250304_0032_ParticleMetrix_Exosomes_size_520F550.avi

SOP: Experiment Parameters

Select an SOP... EV_F520

Reload

Protect ☐ Save Current Settings as New SOP

Delete SOP Update SOP

Description

Experiment

Zetapot. Size Positions

11 2 1

Cont. Pulsed +/- Frames # Cycles

Continuous: < 2 mS/cm Pulsed: > 2 mS/cm

Low Med High Highest

Options

☒ Autosave .txt ☒ Set Temperature 25.0

☒ Autosave .pdf ☐ Multiple Acquisitions

☒ Low Bleach

☒ Dose Sub Volume

Use Pump Pump 2 20 µL

Fluorescence Filter 550 nm

Laser 405 488 520 640

Concentration

1 Concentration Correction Factor

Camera Control

Sensitivity 95.0 Frame Rate 30.00

Shutter 100

Post Acquisition Parameters

Min Brightness 30 Auto Brightness ☐

Max Area 1000 Multi-Threshold ☐

Min Area 10 PSD log Correction ☐

Tracelength 7 Max Track Radius² 100

nm / Class 5 Classes / Decade 64

☒ New Traces

Compare

Compare the current values with the SOP settings. Applies to Camera Control and some of the Post Acquisition Parameters

Read Current

OK Cancel