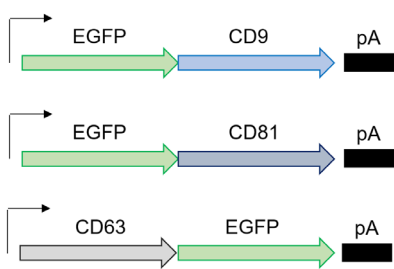


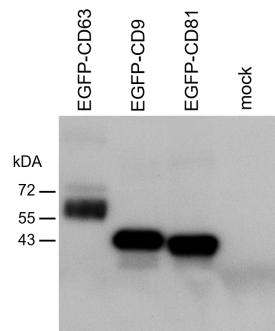
FLuoEVs: Purified EVs expressing Fluorescent proteins

A next generation of fluorescent EVs

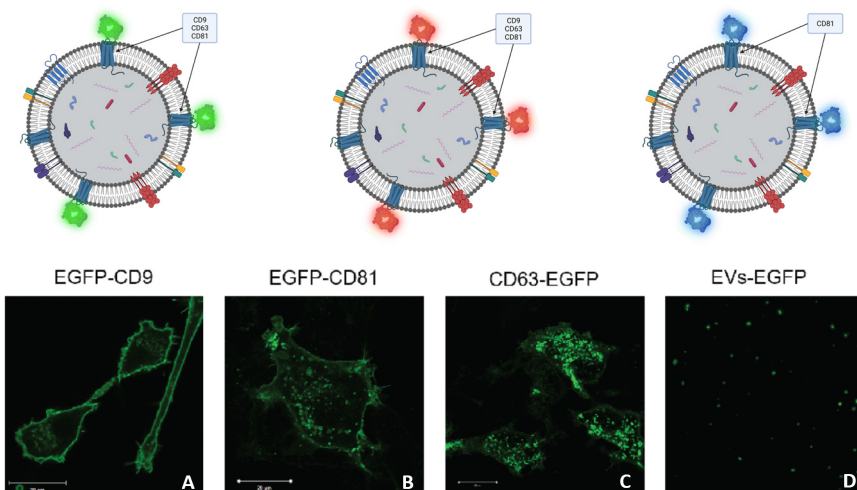
FLUO-EVs are stably-fluorescent EVs expressing the fluorescent protein EGFP (green) BFP (blue) or mCherry (Red) as fusion protein with tetraspanins CD9, CD81 and CD63. FLUO-EVs demonstrated high stability of the fluorophores, they can be used for *in vitro* tracking studies or as reference material for analyzers of nanoparticles or for assay calibration.



*available also with mCherry and BFP (CD81 only)



FLuoEVs are extracellular vesicles purified by combination of Tangential Flow Filtration (TFF) and Size Exclusion Chromatography (SEC) from cells engineered in order to express the fluorescent proteins as fusion protein with the tetraspanin CD9, CD63 or CD81



A, B, C: Transfected cells expressing EGFP as fusion protein with CD9, CD81, CD63. D: Purified EVs expressing EGFP.

Characteristics

- Particle size distribution: 50-140 nm
- CD9, CD63, CD81 conjugated with EGFP, BFP or mCherry
- Increased fluorophore stability over membrane dyes

Applications

- Cell spike-in and *in vitro* tracking, EV uptake monitoring
- Positive control for EV analyzers
- Assay/instrument calibration

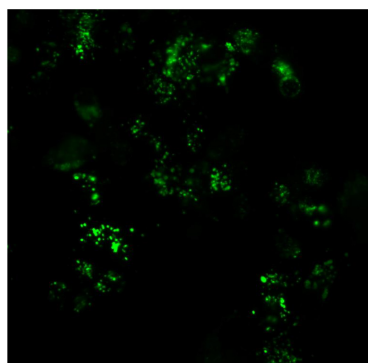
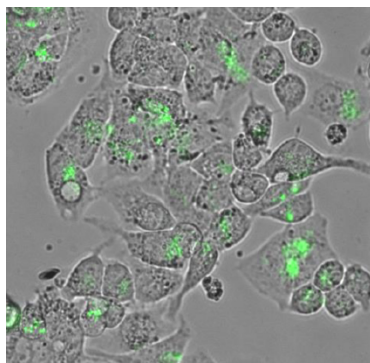
Advantages

- Easy and long term storage (4-8°C)
- High fluorophore stability
- Fluorescent custom EVs on request

Let the light shine out of the darkness

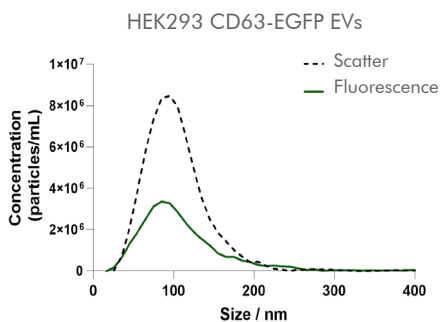
Application in Extracellular Vesicle research

In vitro tracking studies, uptake of labeled EVs in cultured cells

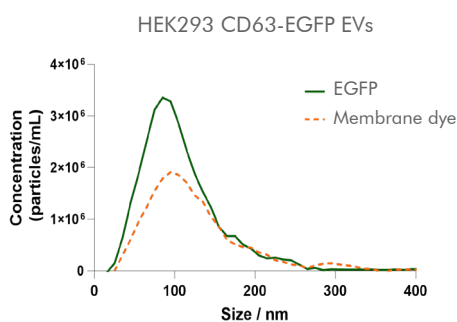


Fluorescent EVs uptake in living and fixed cells post spike-in with FLuoEVs (HEK-CD63-EGFP)

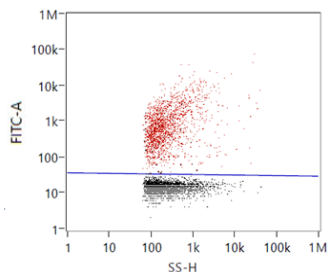
FLuoEVs: performance on common used nanoanalyzers



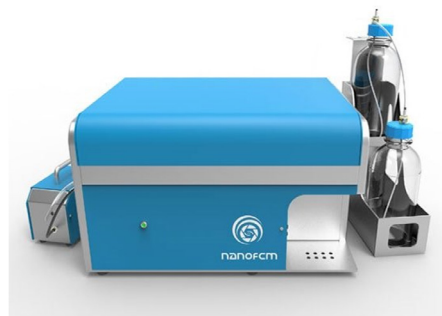
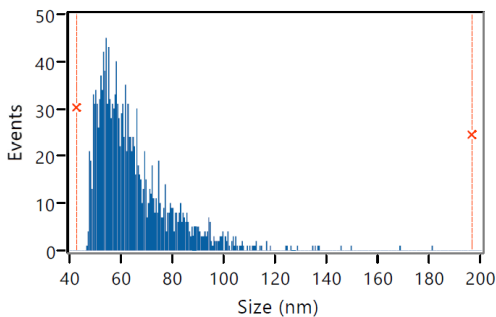
FLuoEVs HEK293-CD63-EGFP analysis in scattered vs fluorescence mode (percentage of fluorescent particles 40 - 60 %)



Comparison of FLuoEVs HEK293-CD63-EGFP and HEK293 EVs labeled with the lipidic dye Bodipy.



FLuoEVs HEK293-CD63-EGFP analysis by NanoAnalyzer NanoFCM (percentage of fluorescent particles 60 - 80 %)



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