

Publication	Exercise Protocol	Bio-fluid	Author-used Terminology	Isolation Method	miRNA Methodology	miRNA Species	Collection Time Periods miRNA results		
ACUTE EXERCISE STIMULUS									
							2h	24h	
							<u>Post-Ex</u>	<u>Post-Ex</u>	
Lovett et al., 2018	PMJ (10 x 10 maximal jumps) followed by DHR (5 x 4 min DHR at 10km/h at 10% decline) in untrained males	PLA	EVs in exosome size range	DC SEC	TaqMan Advanced miRNA assays	miR-1 miR-31 miR-133a miR-133b miR-206 miR-208b miR-486 miR-499a	↔ ↑ ↔ ↔ ND ↔ ↔ ↔ ND	↔ ↑ ↔ ↔ ND ↔ ↔ ↔ ND	
							<u>Post-Ex</u>	4h <u>Post-Ex</u>	
D'Souza et al., 2018	10 x 60s intervals of cycling at peak power output in healthy men	PLA	Exosomes	DC SEC 0.22 μm filter	TaqMan Advanced miRNA assays (n = 29, not all listed)	miR-1-3p miR-16-5p miR-23a-3p miR-23b-3p miR-126-3p miR-150-5p miR-186-5p miR-208a-3p miR-222-3p miR-378a-5p miR-451a miR-486-5p	↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑	↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔	
							<u>Not Detectable (ND)</u>		
						miR-423-5p miR-149-5p miR-494-3p miR-24-1-5p miR-27a-5p miR-33a-3p	miR-133a-3p miR-191-5p miR-206 miR-320a miR-361-5p miR-499a-3p		
							<u>Post-Ex</u>		
Guescini et al., 2015	40 min vigorous intensity treadmill running (15 min warm-up followed by 40 min at ~80% VO _{2max} at 1% grade) in well-trained men	PLA	EVs	DC 0.22 μm filter UC IBI	TaqMan Advanced miRNA assays	miR-1 miR-24 miR-133a miR-133b miR-136a miR-181a-5p miR-206 miR-499	↔ ↔ ↔ ↔ ↔ ↑ ↔ ↔		
							<u>Post-Ex</u>	2h <u>Post-Ex</u>	48h <u>Post-Ex</u>
Annibalini et al., 2019	Resistance training (5 x 10 maximal squats, 3 min rest interval) on a flywheel in trained men	PLA	EVs	DC UC	miRCURY LNA miRNA PCR Assay	miR-126-3p miR-133b miR-146a-5p miR-206	↔ ↔ ↑ ↑	↔ ↔ ↔ ↔	↔ ↔ ↔ ↔

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CHRONIC EXERCISE TRAINING							
Chaturvedi et al., 2015	8-wk treadmill training in db/+ mice (7 m·min ⁻¹) and db/db mice (10 m·min ⁻¹) for 300m/d, 5d/wk	SER	Exosomes	DC 0.2 µm filter UC	Custom design (synthetic miRNA oligonucleotides)	miR-455	<u>Following Training</u> ↑
						miR-29b	↑
						miR-323-5p	↔
						miR-466	↔
Hou et al., 2019	4-wk swimming training (10m progressed to 90m/day ~7days/wk) in Sprague-Dawley rats	PLA	Exosomes	DC Exoquick™ Precipitation UC	miRNA library sequencing (Commercial service)	miR-3571	<u>Following Training</u> ↑
						miR-1-3p	↑
						miR-342-5p	↑
						miR-122-5p	↑
						miR-196b-5p	↑
						miR-486	↑
						miR-208-3p	↑
						miR-3591	↑
						miR-184	↑
						miR-760-3p	↑
						miR-99a-5p	↑
						miR-191-5p	↓
						miR-494-3p	↔
miR-206-3p	↔						

Supplementary Table 1: The effect of acute or chronic exercise on miRNA abundance in ELV-enriched blood borne fractions. DC; differential centrifugation; DHR: downhill running; EM: electron microscopy; EV: Extracellular Vesicles; IBI; Immuno-bead isolation; PLA; Plasma; PMJ: plyometric jumping; RT; recreationally trained prior to study initiation, SEC: Size Exclusion Chromatography; SER: serum; UC: ultracentrifugation; UHR: uphill running; ↑; statistically significant increase, ↔ non-significant changes, ↓; significant decrease denoted by statistical tests performed in the publication of origin.