Table S1. Mean and Standard Deviation (SD) of MTT values (figure 1a)

ID samples	CTL	SP1	SP5	SP10	SP50	SP100
Mean	2,954	2,603	2,562	2,402	2,093	1,591
SD	0,3445	0,3450	0,2142	0,1306	0,2965	0,3888

Table S2. Mean and Standard Deviation (SD) of MTT values (figure 1b)

ID samples	CTL	LRAP1	LRAP5	LRAP10	LRAP50	LRAP100
Mean	2,954	2,719	2,867	2,595	2,179	0,8467
SD	0,3445	0,1355	0,3249	0,2259	0,2774	0,3668

Table S3. Mean and Standard Deviation (SD) of MTT values (figure 1c)

ID samples	CTL	SP1	SP5	SP10	SP50	SP100
Mean	1,775	1,716	1,770	1,667	1,625	1,701
SD	0,1914	0,1341	0,1381	0,1504	0,2004	0,04619

Table S4. Mean and Standard Deviation (SD) of MTT values (figure 1d)

ID samples	CTL	LRAP1	LRAP5	LRAP10	LRAP50	LRAP100
Mean	1,884	1,769	1,815	1,696	1,690	1,680
SD	0,05336	0,02579	0,03259	0,1085	0,05336	0,1124

Table S5. Mean and Standard Deviation (SD) of ALP activity values (figure 2a)

ID samples	CTL	SP1	SP5	SP10	LRAP1	LRAP5	LRAP10
Mean	0,9488	1,204	1,723	1,782	0,9343	1,227	1,635
SD	0,02564	0,04132	0,1825	0,04720	0,03073	0,1851	0,3795

Table S6. Mean and Standard Deviation (SD) of ALP activity values (figure 2c)

ID samples	CTL	SP1	SP5	SP10	LRAP1	LRAP5	LRAP10
Mean	1,000	1,143	2,331	2,660	0,9564	3,526	3,496
SD	0,3339	0,2923	0,5441	0,2604	0,3869	0,7247	0,6702

Table S7. Mean and Standard Deviation (SD) of absorbance (O.D.) values at 405 nm (figure 3b)

ID samples	CTL	SP1	SP5	SP10	LRAP1	LRAP5	LRAP10
Mean	1,000	0,8551	1,505	2,605	1,234	0,9164	3,254
SD	0,3664	0,1753	0,2397	0,1606	0,1286	0,2982	0,09283

Table S8. Mean and Standard Deviation (SD) of absorbance (O.D.) values at 405 nm (figure 3d)

ID samples	CTL	SP1	SP5	SP10	LRAP1	LRAP5	LRAP10
Mean	1,000	1,534	2,218	2,814	1,134	4,539	3,732
SD	0,3137	0,8910	0,8855	0,6322	0,3746	0,9361	0,7350

Table S9. Mean and Standard Deviation (SD) of Quantitative PCR analysis values (figure 4a RUNX2)

ID samples	CTL	SP1	SP5	SP10	LRAP1	LRAP5	LRAP10
Mean	1,000	1,182	1,248	1,406	1,443	1,363	2,899
SD	0,06579	0,5636	0,3972	0,4065	0,3264	0,1927	0,2389

Table S10. Mean and Standard Deviation (SD) of Quantitative PCR analysis values (figure 4a Col1α1)

ID samples	CTL	SP1	SP5	SP10	LRAP1	LRAP5	LRAP10
Mean	1,000	1,054	1,434	1,086	2,232	2,528	2,708
SD	0,2480	0,2320	0,3884	0,1337	0,07467	0,6904	0,3094

Table S11. Mean and Standard Deviation (SD) of Quantitative PCR analysis values (figure 4a OCN)

ID samples	CTL	SP1	SP5	SP10	LRAP1	LRAP5	LRAP10
Mean	1,000	1,841	1,322	0,4138	0,7707	5,760	9,734
SD	0,2245	0,1662	0,3878	0,1543	0,2802	2,859	2,201

Table S12. Mean and Standard Deviation (SD) of Quantitative PCR analysis values (figure 4a MEPE)

ID samples	CTL	SP1	SP5	SP10	LRAP1	LRAP5	LRAP10
Mean	1,000	1,178	1,235	4,082	0,6052	1,930	23,30
SD	0,3330	0,1331	0,4146	1,702	0,02164	0,6380	4,307

Table S13. Mean and Standard Deviation (SD) of Quantitative PCR analysis values (figure 4a DMP-1)

ID samples	CTL	SP1	SP5	SP10	LRAP1	LRAP5	LRAP10
Mean	1,000	0,3067	1,128	0,6157	0,2607	0,1679	3,771
SD	0,2215	0,02721	0,4785	0,2355	0,09150	0,1151	1,044

Table S14. Mean and Standard Deviation (SD) of Quantitative PCR analysis values (figure 4b RUNX2)

ID samples	CTL	SP1	SP5	SP10	LRAP1	LRAP5	LRAP10
Mean	1,000	1,017	0,7306	0,9549	1,687	1,430	1,720
SD	0,4297	0,1404	0,2656	0,4172	0,7557	0,9281	0,6164

Table S15. Mean and Standard Deviation (SD) of Quantitative PCR analysis values (figure 4b Col1α1)

ID samples	CTL	SP1	SP5	SP10	LRAP1	LRAP5	LRAP10
Mean	1,000	0,9493	1,299	1,606	1,213	2,205	3,072
SD	0,2222	0,2559	0,3617	0,4954	0,1180	0,2667	0,1326

Table S16. Mean and Standard Deviation (SD) of Quantitative PCR analysis values (figure 4b OCN)

ID samples	CTL	SP1	SP5	SP10	LRAP1	LRAP5	LRAP10
Mean	1,000	1,507	3,073	2,105	1,348	2,942	2,085
SD	0,4340	0,6642	0,6841	0,5219	0,3074	0,5553	0,2816

Table S17. Mean and Standard Deviation (SD) of Quantitative PCR analysis values (figure 4b MEPE)

ID samples	CTL	SP1	SP5	SP10	LRAP1	LRAP5	LRAP10
Mean	1,000	0,9311	0,6483	0,8063	0,9128	1,033	0,6314
SD	1,098	0,9839	0,7215	0,5405	1,003	0,8599	0,2485

Table S18. Mean and Standard Deviation (SD) of Quantitative PCR analysis values (figure 4b DMP-1)

ID samples	CTL	SP1	SP5	SP10	LRAP1	LRAP5	LRAP10
Mean	1,000	0,9296	1,124	0,8812	1,456	1,344	1,046
SD	0,3978	0,4182	0,3330	0,4130	0,8367	0,3293	0,2761

Table S19. Mean and Standard Deviation (SD) of β-Catenin fluorescence intensity in nuclear/cytoplasmic values (figure 5b)

	Nucleus					Cytosol				
ID samples	CTL	SP5	SP10	LRAP5	LRAP10	CTL	SP5	SP10	LRAP5	LRAP10
Mean	0,6757	0,8740	3,043	1,192	2,605	3,324	3,258	1,348	1,801	1,080
SD	0,2523	0,3965	0,8428	0,2714	0,7293	0,4391	0,4304	0,4468	0,06679	0,3454

Table S20. Mean and Standard Deviation (SD) of of β-Catenin fluorescence intensity in nuclear/cytoplasmic values (figure 5d)

	Cytosol				
ID samples	CTL	SP5	SP10	LRAP5	LRAP10
Mean	1,660	3,812	4,607	7,808	10,73
SD	0,8742	1,309	1,362	0,7342	1,169