

Supporting information for:

Exocytosis of peptide functionalized gold nanoparticles in endothelial cells.

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Table S1. DLS and zeta potential parameters of P_{inh}-OEG-NPs and P_{mut}-OEG-NPs.

NPs	Media	DLS	Average	Stdev	Zeta	Average	Stdev
P _{mut} -OEG-NPs	Introduced	32.5	34	4.0	-22.7	-16.9	5.0
		31			-14.2		
		38.5			-13.8		
	Exocytosed	32.6	36.1	3.0	-19.9	-18.8	3.5
		37.8			-21.6		
		37.9			-14.9		
P _{inh} -OEG-NPs	Introduced	32	36.2	4.0	-20.1	-19.6	2.5
		39.9			-21.8		
		36.7			-16.9		
	Exocytosed	44.2	41.5	3.0	-21.1	-19.2	2.0
		42			-19.3		
		38.3			-17.2		

Table S2. ICP-AES measurements for the estimation of the total gold content within HUVECs after 4h treatment with P_{inh}-OEG-NPs or P_{mut}-OEG-NPs.

NPs type	Gold [ppm]	Gold [g/ml]	Gold atoms per NP	NP weight [g]	NPs/ml	NPs/cell	Average
P _{mut} -OEG-NPs	1.074	1.07E-06	105448	3.45E-17	31130434783	311304.35	337053
	1.116	1.12E-06			32347826087	323478.26	
	1.2985	1.30E-06			37637681159	376376.81	
P _{inh} -OEG-NPs	0.901	9.01E-07	105448	3.45E-17	26115942029	261159.42	268937
	0.964	9.64E-07			27942028986	279420.29	
	0.9185	9.19E-07			26623188406	266231.88	

Table S3. ICP-AES measurements for the estimation of the total gold content within HUVECs and in the growth media after 2, 4 and 6h of NPs exocytosis.

NPs type	Exocytosis [h]	NPs location	Gold [ppm]	Gold [g/ml]	Gold atoms per NP	NP weight [g]	NPs/ml	NPs/cell	Average	% of NPs	NPs total		
P _{mut} -OEG-NPs	2h	growth media	0.593	5.93E-07	105448	3.45E-17	1.719E+10	171884.06	131981	26.14	100.0 ± 8.5		
			0.4035	4.035E-07			1.17E+10	116956.52					
			0.3695	3.695E-07			1.071E+10	107101.45					
		adherent cells	1.6235	1.624E-06			4.706E+10	470579.71					
			1.071	1.071E-06			3.104E+10	310434.78					
			1.1655	1.166E-06			3.378E+10	337826.09					
	4h	growth media	0.2925	2.925E-07			8.478E+09	84782.609	68309	13.53	463043	91.70	105.2 ± 7
			0.1925	1.925E-07			5.58E+09	55797.101					
			0.222	2.22E-07			6.435E+09	64347.826					
		adherent cells	1.867	1.867E-06			5.412E+10	541159.42					
			1.394	1.394E-06			4.041E+10	404057.97					
			1.5315	1.532E-06			4.439E+10	443913.04					
	6h	growth media	0.563	5.63E-07			1.632E+10	163188.41	191836	37.99	325024	64.37	102.4 ± 9.5
			0.5475	5.475E-07			1.587E+10	158695.65					
			0.875	8.75E-07			2.536E+10	253623.19					
		adherent cells	1.489	1.489E-06			4.316E+10	431594.2					
			1.028	1.028E-06			2.98E+10	297971.01					
			0.847	8.47E-07			2.455E+10	245507.25					
P _{inh} -OEG-NPs	2h	growth media	1.394	1.394E-06	4.041E+10	404057.97	360000	16.80	1783188	83.20	100.0 ± 1.9		
			1.4165	1.417E-06	4.106E+10	410579.71							
			0.9155	9.155E-07	2.654E+10	265362.32							
		adherent cells	5.7	0.0000057	1.652E+11	1652173.9							
			5.267	5.267E-06	1.527E+11	1526666.7							
			7.489	7.489E-06	2.171E+11	2170724.6							
	4h	growth media	2.4745	2.475E-06	7.172E+10	717246.38	588358	27.45	1872560	87.37	114.83 ± 18.3		
			1.9295	1.93E-06	5.593E+10	559275.36							
			1.6855	1.686E-06	4.886E+10	488550.72							
		adherent cells	4.666	4.666E-06	1.352E+11	1352463.8							
			5.135	5.135E-06	1.488E+11	1488405.8							
			9.58	9.58E-06	2.777E+11	2776811.6							
	6h	growth media	1.812	1.812E-06	5.252E+10	525217.39	626618	29.24	140019	65.33	94.57 ± 10.6		
			1.9025	1.903E-06	5.514E+10	551449.28							
			2.771	2.771E-06	8.032E+10	803188.41							
		adherent cells	5.294	5.294E-06	1.534E+11	1534492.8							
			6.119	6.119E-06	1.774E+11	1773623.2							
			3.079	3.079E-06	8.925E+10	892463.77							