

**Table S3.** Pathways associated with significant DEGs between control chip cultures and COLIV-coated inserts.

	<b>Pathway description [# Genes]</b>	<b># of associated DEGs</b>	<b>ID</b>	<b>p value</b>	<b>q value</b>
1	HALLMARK_TNFA_SIGNALING_VIA_NFKB [200]	94	M5890	1.86 e <sup>-70</sup>	1.03 e <sup>-66</sup>
2	GO_REGULATION_OF_INTRACELLULAR_SIGNAL_TRANSDUCTION [1864]	279	GO:1902531	2 e <sup>-70</sup>	1.03 e <sup>-66</sup>
3	GO_REGULATION_OF_CELL_POPULATION_PROLIFERATION [1766]	270	GO:0042127	4.69 e <sup>-70</sup>	1.61 e <sup>-66</sup>
4	GO_REGULATION_OF_PHOSPHORYLATION [1668]	261	GO:0042325	9.27 e <sup>-70</sup>	2.39 e <sup>-66</sup>
5	GO_REGULATION_OF_PHOSPHORUS_METABOLIC_PROCESSES [1868]	278	GO:0051174	1.32 e <sup>-69</sup>	2.72 e <sup>-66</sup>
6	GO_APOPTOTIC_PROCESS [1994]	284	GO:0006915	6.91 e <sup>-67</sup>	1.19 e <sup>-63</sup>
7	GO_REGULATION_OF_PROTEIN_MODIFICATION_PROCESS [1915]	273	GO:0031399	2.94 e <sup>-64</sup>	4.33 e <sup>-61</sup>
8	GO_REGULATION_OF_CELL_DIFFERENTIATION [1945]	267	GO:0045595	2.18 e <sup>-59</sup>	2.81 e <sup>-56</sup>
9	GO_BIOLOGICAL_ADHESION [1481]	227	GO:0022610	9.89 e <sup>-59</sup>	1.13 e <sup>-55</sup>
10	GO_REGULATION_OF_CELL_DEATH [1746]	249	GO:0010941	2.04 e <sup>-58</sup>	2.1 e <sup>-55</sup>