

Supplementary Table SIII GO functional enrichment of the 85 differentially expressed genes between LH + 2 and LH + 7. Number of genes, percentage of genes belonging to each category and P-value are indicated.

Term	Count	%	P-value	Fold enrichment
BP Negative regulation of growth	7	8.3	2.70E-10	75.4
BP Cellular response to zinc ion	7	8.3	2.70E-10	75.4
BP Cellular response to cadmium ion	5	6	1.10E-06	60.2
BP Extracellular matrix organization	9	10.7	4.60E-06	9.4
BP Embryo implantation	5	6	4.90E-05	24.4
BP Positive regulation of nitric oxide biosynthetic process	5	6	5.40E-05	23.8
BP Membrane to membrane docking	3	3.6	2.30E-04	122.9
BP Leukocyte cell-cell adhesion	4	4.8	2.30E-04	32.8
BP Negative regulation of apoptotic process	10	11.9	3.40E-04	4.5
BP Positive regulation of cell division	4	4.8	1.50E-03	17.4
BP Positive regulation of p38MAPK cascade	3	3.6	2.60E-03	38.4
BP Protein homotetramerization	4	4.8	3.00E-03	13.7
BP Response to vitamin D	3	3.6	3.30E-03	34.1
BP Cell chemotaxis	4	4.8	3.80E-03	12.6
BP Regulation of blood pressure	4	4.8	3.80E-03	12.6
BP Interferon-gamma-mediated signaling pathway	4	4.8	4.90E-03	11.5
BP Cellular response to vascular endothelial growth factor stimulus	3	3.6	5.40E-03	26.7
BP Extracellular matrix disassembly	4	4.8	5.90E-03	10.8
BP Extracellular space	33	39.3	7.30E-16	5.4
CC Extracellular region	31	36.9	4.40E-12	4.2
CC Perinuclear region of cytoplasm	14	16.7	3.80E-06	4.9
CC Extracellular exosome	29	34.5	2.10E-05	2.3
CC Proteinaceous extracellular matrix	7	8.3	1.30E-03	5.7
CC Cell surface	9	10.7	3.00E-03	3.6
CC Immunological synapse	3	3.6	1.00E-02	19.4
CC External side of plasma membrane	5	6	1.60E-02	5.2
CC Vesicle	4	4.8	2.00E-02	6.9
MF Growth factor activity	7	8.3	1.20E-04	9
MF Cytokine activity	6	7.1	1.50E-03	7.1
MF S100 protein binding	3	3.6	1.70E-03	48.1
MF Calcium-dependent protein binding	4	4.8	2.60E-03	14.4
MF Cell adhesion molecule binding	4	4.8	3.20E-03	13.4
MF Integrin binding	4	4.8	1.40E-02	7.9
MF Receptor binding	6	7.1	2.60E-02	3.5
MF Primary amine oxidase activity	2	2.4	2.80E-02	69.5
MF Calcium-dependent phospholipid binding	3	3.6	3.10E-02	10.8
MF Small molecule binding	2	2.4	3.30E-02	59.5
MF ATPase binding	3	3.6	4.80E-02	8.4
MF Zinc ion binding	11	13.1	4.90E-02	2
MF Phospholipase inhibitor activity	2	2.4	5.10E-02	37.9
MF Protein binding	50	59.5	6.10E-02	1.2
MF Hormone activity	3	3.6	7.30E-02	6.7
MF Peroxidase activity	2	2.4	9.90E-02	18.9