

Supplemental Table 2. Basal vs. Luminal Direct Cocultures, Significant Molecular Functions by Ingenuity Pathway Analysis

Molecular Functions	Black Cell Denotes Significance (p<0.05) ^a		Benjamini-Hochberg P-Value ^b	
	Basal	Luminal	Basal	Luminal
Amino Acid Metabolism			--	1.77E-02-1.77E-02
Antigen Presentation			9.67E-04-3.24E-02	3.23E-02-4.85E-02
Carbohydrate Metabolism			2.25E-02-4.09E-02	2.49E-02-5.41E-02
Cell Cycle			4.04E-03-4.09E-02	1.77E-02-7.39E-02
Cell Death			5.03E-05-4.09E-02	7.14E-04-7.59E-02
Cell Morphology			9.02E-03-4.09E-02	1.07E-03-7.59E-02
Cell Signaling			2.28E-03-4.09E-02	1.03E-02-7.16E-02
Cell-To-Cell Signaling and Interaction			5.78E-07-4.09E-02	1.23E-03-7.53E-02
Cellular Assembly and Organization			3.17E-03-4.09E-02	1.77E-02-7.53E-02
Cellular Compromise			1.03E-02-4.09E-02	1.77E-02-7.16E-02
Cellular Development			3.06E-05-4.09E-02	1.23E-03-7.53E-02
Cellular Function and Maintenance			1.03E-02-4.09E-02	1.77E-02-7.16E-02
Cellular Growth and Proliferation			2E-04-4.09E-02	3.57E-05-7.16E-02
Cellular Movement			3.28E-07-4.09E-02	1.85E-05-7.53E-02
DNA Replication, Recombination, and Repair			--	2.49E-02-2.49E-02
Drug Metabolism			1.99E-03-3.24E-02	1.55E-02-6.91E-02
Gene Expression			1.2E-02-4.09E-02	1.77E-02-5.91E-02
Lipid Metabolism			7.26E-04-4.09E-02	2.66E-03-6.91E-02
Molecular Transport			2.28E-03-4.09E-02	2.66E-03-7.16E-02
Nucleic Acid Metabolism			--	2.49E-02-2.49E-02
Post-Translational Modification			--	1.77E-02-1.77E-02
RNA Damage and Repair			2.27E-02-2.27E-02	--
RNA Post-Transcriptional Modification			2.27E-02-4.09E-02	4.91E-02-4.91E-02
Small Molecule Biochemistry			7.26E-04-4.09E-02	2.66E-03-7.16E-02
Vitamin and Mineral Metabolism			2.28E-03-4.09E-02	1.03E-02-6.91E-02

^aP-value represents Benjamini-Hochberg corrected p-value from Ingenuity Pathway Analysis

^bWhere no p-value is reported (--) no genes for this pathway were present for that coculture type