

Supplemental Table 3. 3 weeks on diet qPCR Ingenuity Pathway Analysis

1) Significant Gene List (5):

CCL24  
CCL3  
FGF18  
Hand2  
IL4

2) Top Canonical Pathways

Ingenuity Canonical Pathways	B-H Adjusted p-value	Ratio	Molecules
Communication between Innate and Adaptive Immune Cells	9.11E-03	2/109	CCL3L1/CCL3L3,IL4
Granulocyte Adhesion and Diapedesis	9.33E-03	2/175	CCL3L1/CCL3L3,CCL24
Agranulocyte Adhesion and Diapedesis	9.33E-03	2/186	CCL3L1/CCL3L3,CCL24

3) Function Table

Category	Functions Annotation	B-H Adjusted p-value	Molecules	Number of Molecules
3wk qPCR IPA Function Table				
Behavior	behavior	6.64E-03	CCL3L1/CCL3L3,HAND2,IL4	3
Cancer	hyperplasia	5.24E-03	CCL24,CCL3L1/CCL3L3,IL4	3
Cardiovascular System Development and Function	angiogenesis	1.24E-03	CCL24,FGF18,HAND2,IL4	4
	development of cardiovascular system	7.34E-03	CCL24,HAND2,IL4	3
Cell Death and Survival	necrosis	9.00E-03	CCL3L1/CCL3L3,FGF18,HAND2,IL4	4
	cell viability	1.00E-02	FGF18,HAND2,IL4	3
Cell Signaling*	flux of Ca <sup>2+</sup>	1.75E-03	CCL24,CCL3L1/CCL3L3,IL4	3
	quantity of Ca <sup>2+</sup>	3.13E-03	CCL24,CCL3L1/CCL3L3,IL4	3
Cell-mediated Immune Response	cell movement of T lymphocytes	1.24E-03	CCL24,CCL3L1/CCL3L3,IL4	3
Cell-To-Cell Signaling and Interaction*	recruitment of eosinophils	7.92E-05	CCL24,CCL3L1/CCL3L3,IL4	3
	communication of cells	2.06E-03	CCL24,FGF18,IL4	3
Cellular Development*	differentiation of connective tissue cells	6.77E-04	CCL3L1/CCL3L3,FGF18,HAND2,IL4	4
	proliferation of hematopoietic cells	1.61E-03	CCL24,CCL3L1/CCL3L3,IL4	3
Cellular Function and Maintenance	flux of Ca <sup>2+</sup>	1.75E-03	CCL24,CCL3L1/CCL3L3,IL4	3
Cellular Growth and Proliferation*	formation of osteoclasts	2.44E-04	CCL3L1/CCL3L3,FGF18,IL4	3
	proliferation of hematopoietic cells	1.61E-03	CCL24,CCL3L1/CCL3L3,IL4	3

	colony formation of cells	3.30E-03	CCL24,CCL3L1/CCL3L3,IL4	3
	proliferation of connective tissue cells	3.99E-03	CCL24,FGF18,IL4	3
	<b>proliferation of cells</b>	<b>4.84E-03</b>	<b>CCL24,CCL3L1/CCL3L3,FGF18,HAND2,IL4</b>	<b>5</b>
Cellular Movement*	<b>chemotaxis of eosinophils</b>	<b>6.40E-05</b>	<b>CCL24,CCL3L1/CCL3L3,IL4</b>	<b>3</b>
	recruitment of eosinophils	7.92E-05	CCL24,CCL3L1/CCL3L3,IL4	3
	migration of granulocytes	6.77E-04	CCL24,CCL3L1/CCL3L3,IL4	3
	cell movement of dendritic cells	6.77E-04	CCL24,CCL3L1/CCL3L3,IL4	3
	chemotaxis of mononuclear leukocytes	9.71E-04	CCL24,CCL3L1/CCL3L3,IL4	3
	cell movement of T lymphocytes	1.24E-03	CCL24,CCL3L1/CCL3L3,IL4	3
	cell movement of neutrophils	1.75E-03	CCL24,CCL3L1/CCL3L3,IL4	3
	chemotaxis of phagocytes	1.87E-03	CCL24,CCL3L1/CCL3L3,IL4	3
Connective Tissue Development and Function	formation of osteoclasts	2.44E-04	CCL3L1/CCL3L3,FGF18,IL4	3
Connective Tissue Disorders	rheumatoid arthritis	4.97E-03	CCL24,CCL3L1/CCL3L3,IL4	3
Gene Expression	activation of DNA endogenous promoter	7.54E-03	CCL3L1/CCL3L3,HAND2,IL4	3
Hematological Disease	eosinophilic inflammation	1.17E-04	CCL24,CCL3L1/CCL3L3,IL4	3
Hematological System Development and Function	<b>chemotaxis of eosinophils</b>	<b>6.40E-05</b>	<b>CCL24,CCL3L1/CCL3L3,IL4</b>	<b>3</b>
	recruitment of eosinophils	7.92E-05	CCL24,CCL3L1/CCL3L3,IL4	3
	migration of granulocytes	6.77E-04	CCL24,CCL3L1/CCL3L3,IL4	3
	cell movement of dendritic cells	6.77E-04	CCL24,CCL3L1/CCL3L3,IL4	3
	chemotaxis of mononuclear leukocytes	9.71E-04	CCL24,CCL3L1/CCL3L3,IL4	3
	cell movement of T lymphocytes	1.24E-03	CCL24,CCL3L1/CCL3L3,IL4	3
	accumulation of leukocytes	1.61E-03	CCL24,CCL3L1/CCL3L3,IL4	3
	proliferation of hematopoietic cells	1.61E-03	CCL24,CCL3L1/CCL3L3,IL4	3
	cell movement of neutrophils	1.75E-03	CCL24,CCL3L1/CCL3L3,IL4	3
	chemotaxis of phagocytes	1.87E-03	CCL24,CCL3L1/CCL3L3,IL4	3
	quantity of granulocytes	1.98E-03	CCL24,CCL3L1/CCL3L3,IL4	3

Hematopoiesis	proliferation of hematopoietic cells	1.61E-03	CCL24,CCL3L1/CCL3L3,IL4	3
Hypersensitivity Response	<b>chemotaxis of eosinophils</b>	<b>6.40E-05</b>	<b>CCL24,CCL3L1/CCL3L3,IL4</b>	<b>3</b>
	recruitment of eosinophils	7.92E-05	CCL24,CCL3L1/CCL3L3,IL4	3
Immune Cell Trafficking	<b>chemotaxis of eosinophils</b>	<b>6.40E-05</b>	<b>CCL24,CCL3L1/CCL3L3,IL4</b>	<b>3</b>
	recruitment of eosinophils	7.92E-05	CCL24,CCL3L1/CCL3L3,IL4	3
	migration of granulocytes	6.77E-04	CCL24,CCL3L1/CCL3L3,IL4	3
	cell movement of dendritic cells	6.77E-04	CCL24,CCL3L1/CCL3L3,IL4	3
	chemotaxis of mononuclear leukocytes	9.71E-04	CCL24,CCL3L1/CCL3L3,IL4	3
	cell movement of T lymphocytes	1.24E-03	CCL24,CCL3L1/CCL3L3,IL4	3
	accumulation of leukocytes	1.61E-03	CCL24,CCL3L1/CCL3L3,IL4	3
	cell movement of neutrophils	1.75E-03	CCL24,CCL3L1/CCL3L3,IL4	3
	chemotaxis of phagocytes	1.87E-03	CCL24,CCL3L1/CCL3L3,IL4	3
	Immunological Disease	eosinophilic inflammation	1.17E-04	CCL24,CCL3L1/CCL3L3,IL4
rheumatoid arthritis		4.97E-03	CCL24,CCL3L1/CCL3L3,IL4	3
Inflammatory Disease	eosinophilic inflammation	1.17E-04	CCL24,CCL3L1/CCL3L3,IL4	3
	rheumatoid arthritis	4.97E-03	CCL24,CCL3L1/CCL3L3,IL4	3
Inflammatory Response	<b>chemotaxis of eosinophils</b>	<b>6.40E-05</b>	<b>CCL24,CCL3L1/CCL3L3,IL4</b>	<b>3</b>
	cell movement of dendritic cells	6.77E-04	CCL24,CCL3L1/CCL3L3,IL4	3
	chemotaxis of mononuclear leukocytes	9.71E-04	CCL24,CCL3L1/CCL3L3,IL4	3
	accumulation of leukocytes	1.61E-03	CCL24,CCL3L1/CCL3L3,IL4	3
	cell movement of neutrophils	1.75E-03	CCL24,CCL3L1/CCL3L3,IL4	3
	chemotaxis of phagocytes	1.87E-03	CCL24,CCL3L1/CCL3L3,IL4	3
	Molecular Transport	flux of Ca <sup>2+</sup>	1.75E-03	CCL24,CCL3L1/CCL3L3,IL4
quantity of Ca <sup>2+</sup>		3.13E-03	CCL24,CCL3L1/CCL3L3,IL4	3
Skeletal and Muscular Disorders	rheumatoid arthritis	4.97E-03	CCL24,CCL3L1/CCL3L3,IL4	3
Skeletal and Muscular System Development and Function	formation of osteoclasts	2.44E-04	CCL3L1/CCL3L3,FGF18,IL4	3
Tissue Development	accumulation of leukocytes	1.61E-03	CCL24,CCL3L1/CCL3L3,IL4	3
	development of	1.75E-03	FGF18,HAND2,IL4	3

connective tissue				
Tissue Morphology	quantity of granulocytes	1.98E-03	CCL24,CCL3L1/CCL3L3,IL4	3
	quantity of cells	4.84E-03	CCL24,CCL3L1/CCL3L3,FGF18,IL4	4
Vitamin and Mineral	flux of Ca <sup>2+</sup>	1.75E-03	CCL24,CCL3L1/CCL3L3,IL4	3
Metabolism	quantity of Ca <sup>2+</sup>	3.13E-03	CCL24,CCL3L1/CCL3L3,IL4	3

\*IPA Top Molecular and Cellular Functions