

SUPPLEMENTARY TABLE.

CCL Gene Regulation after ME Inoculation with NTHI.

For each chemokine differentially regulated during OM, the Affymetrix transcript ID, alternate name and chemoattraction profile (43) is presented, followed by regulation during the course of an episode of acute OM.

CCL GENES UPREGULATED EARLY IN OM (3-24 hrs)

	Time in hrs	Fold change (range)	Significance
<u>CCL4 1421578 at (MIP-1β; macrophage and natural killer cell chemoattractant)</u>			
	0.0 ,	0.999 (0.953 to 1.047)	0.985
	3.0 ,	9.119 (7.256 to 11.46)	0.0656
Time	6.0 ,	12.43 (10.2 to 15.15)	0.0498
Time	24.0 ,	25.91 (20.07 to 33.43)	0.0498
	48.0 ,	8.658 (7.293 to 10.28)	0.0505
	72.0 ,	2.739 (2.2 to 3.411)	0.136
	120.0 ,	0.75 (0.574 to 0.979)	0.476
	168.0 ,	1.009 (0.876 to 1.161)	0.96
<u>CCL5 1418126 at (RANTES; macrophage and natural killer cell chemoattractant)</u>			
	0.0 ,	1 (0.988 to 1.012)	0.996
	3.0 ,	5.417 (3.311 to 8.863)	0.18
Time	6.0 ,	9.342 (8.404 to 10.38)	0.0301
Time	24.0 ,	6.542 (5.727 to 7.472)	0.045
	48.0 ,	1.933 (1.769 to 2.112)	0.085
	72.0 ,	1.169 (0.584 to 2.34)	0.859
	120.0 ,	0.801 (0.775 to 0.828)	0.0935
	168.0 ,	0.975 (0.883 to 1.077)	0.841
<u>CCL11 1417789 at (Eotaxin-1; eosinophil and basophil chemoattractant)</u>			
	0.0 ,	0.82 (0.427 to 1.573)	0.811
	3.0 ,	12.73 (8.317 to 19.47)	0.105
Time	6.0 ,	15.83 (14.44 to 17.34)	0.0211
	24.0 ,	3.25 (2.76 to 3.828)	0.0878
	48.0 ,	0.673 (0.282 to 1.604)	0.727
	72.0 ,	0.547 (0.328 to 0.91)	0.446
	120.0 ,	1.816 (1.592 to 2.072)	0.138
Time	168.0 ,	2.643 (2.618 to 2.669)	0.00634
<u>CCL17 1419413 at (TARC; t-cell chemoattractant)</u>			
	0.0 ,	0.997 (0.919 to 1.081)	0.974
Time	3.0 ,	5.098 (4.676 to 5.558)	0.0337
Time	6.0 ,	5.263 (4.796 to 5.776)	0.0356
	24.0 ,	1.838 (1.714 to 1.972)	0.0731
	48.0 ,	0.896 (0.779 to 1.03)	0.574
	72.0 ,	1.153 (0.984 to 1.352)	0.535
	120.0 ,	0.648 (0.594 to 0.707)	0.126
	168.0 ,	0.845 (0.83 to 0.859)	0.0645
<u>CCL20 1422029 at (MIP-3α; dendritic cell and b-cell chemoattractant)</u>			
	0.0 ,	0.902 (0.569 to 1.431)	0.86
Time	3.0 ,	151.3 (133.9 to 171)	0.0155
Time	6.0 ,	165.7 (150.6 to 182.2)	0.0119
Time	24.0 ,	45.8 (45.69 to 45.92)	0.000422
	48.0 ,	8.24 (5.044 to 13.46)	0.146
Time	72.0 ,	6.049 (5.461 to 6.7)	0.0361
Time	120.0 ,	2.771 (2.682 to 2.862)	0.0202
Time	168.0 ,	2.959 (1.139 to 7.686)	0.459
<u>CCL22 1417925 at (MDC; t-cell chemoattractant)</u>			
	0.0 ,	0.882 (0.529 to 1.471)	0.847
Time	3.0 ,	4.649 (4.475 to 4.829)	0.0158
Time	6.0 ,	5.626 (5.137 to 6.162)	0.0335
	24.0 ,	2.923 (2.289 to 3.733)	0.143
	48.0 ,	1.428 (0.766 to 2.663)	0.669
	72.0 ,	0.869 (0.818 to 0.924)	0.26
	120.0 ,	0.993 (0.763 to 1.294)	0.984
	168.0 ,	0.917 (0.643 to 1.307)	0.847
<u>CCL28 1450218 at (MEC; t-cell and IgA-expressing b-cell chemoattractant)</u>			
	0.0 ,	0.986 (0.831 to 1.169)	0.946
	3.0 ,	1.262 (1.239 to 1.284)	0.049
	6.0 ,	1.369 (1.153 to 1.627)	0.319
Time	24.0 ,	4.982 (4.853 to 5.115)	0.0104
	48.0 ,	1.382 (0.998 to 1.913)	0.502
	72.0 ,	1.453 (1.202 to 1.756)	0.299
	120.0 ,	1.598 (1.339 to 1.908)	0.23
	168.0 ,	1.875 (1.491 to 2.358)	0.222

CCL GENES UPREGULATED LATE IN OM (48-72 hrs)

	Time in hrs	Fold change (range)	Significance
<u>CCL6 1417266 at (HCC-4, mouse only; natural killer and dendritic cell chemoattractant; antibacterial activity) (44)</u>			
	0.0 ,	0.995 (0.904 to 1.096)	0.97
Time	3.0 ,	3.866 (3.517 to 4.25)	0.0445
Time	6.0 ,	4.76 (4.429 to 5.115)	0.0294
Time	24.0 ,	16.56 (13.57 to 20.21)	0.0451
Time	48.0 ,	23.78 (22.29 to 25.37)	0.013
Time	72.0 ,	23.52 (19.58 to 28.25)	0.0369
	120.0 ,	2.034 (1.765 to 2.344)	0.126
	168.0 ,	1.745 (1.454 to 2.096)	0.202

<u>CCL7 1411228 at (MCP-3; monocyte chemoattractant)</u>			
	0.0 ,	0.92 (0.609 to 1.391)	0.874
Time	3.0 ,	9.558 (8.516 to 10.73)	0.0325
Time	6.0 ,	10.1 (9.137 to 11.17)	0.0276
Time	24.0 ,	15.16 (12.79 to 17.96)	0.0397
Time	48.0 ,	63.09 (50.8 to 78.36)	0.0333
Time	72.0 ,	41.91 (40.15 to 43.75)	0.00732
Time	120.0 ,	2.35 (2.22 to 2.488)	0.0424
	168.0 ,	1.563 (1.25 to 1.956)	0.296

<u>CCL8 1419684 at (MCP-2; macrophage chemoattractant)</u>			
	0.0 ,	1 (0.997 to 1.003)	0.999
	3.0 ,	0.891 (0.791 to 1.004)	0.51
	6.0 ,	1.019 (1.006 to 1.032)	0.377
Time	24.0 ,	0.455 (0.431 to 0.479)	0.0429
	48.0 ,	2.504 (1.975 to 3.176)	0.161
Time	72.0 ,	5.675 (5.564 to 5.789)	0.00725
Time	120.0 ,	1.683 (1.647 to 1.72)	0.0267
	168.0 ,	1.922 (1.773 to 2.083)	0.0781

<u>CCL9 (MIP-1γ) 1417936 at (dendritic cell chemoattractant; osteoclast activator)</u>			
	0.0 ,	0.996 (0.907 to 1.093)	0.97
Time	3.0 ,	3.434 (3.3 to 3.572)	0.0204
	6.0 ,	3.942 (3.42 to 4.544)	0.0658
Time	24.0 ,	10.92 (9.35 to 12.77)	0.0414
Time	48.0 ,	18.33 (16.96 to 19.81)	0.017
Time	72.0 ,	15.44 (13.27 to 17.96)	0.0351
Time	120.0 ,	2.69 (2.657 to 2.723)	0.00786
Time	168.0 ,	2.314 (2.302 to 2.326)	0.00393

<u>CCL12 1419282 at (eosinophil, monocyte and lymphocyte chemoattractant)</u>			
	0.0 ,	0.979 (0.796 to 1.204)	0.935
Time	3.0 ,	9.297 (9.027 to 9.575)	0.00841
	6.0 ,	6.875 (4.325 to 10.93)	0.15
	24.0 ,	4.959 (4.065 to 6.05)	0.0786
Time	48.0 ,	57.78 (49.76 to 67.09)	0.0234
Time	72.0 ,	32.34 (31.62 to 33.08)	0.00413
Time	120.0 ,	5.078 (4.945 to 5.214)	0.0103
Time	168.0 ,	4.242 (4.178 to 4.307)	0.00669

CCL GENES UPREGULATED BOTH EARLY AND LATE IN OM

	Time in hrs	Fold change (range)	Significance
<u>CCL2 1420380 at (MCP-1; monocyte chemoattractant)</u>			
	0.0 ,	0.988 (0.846 to 1.154)	0.951
	3.0 ,	37.81 (25.18 to 56.78)	0.0709
Time	6.0 ,	45.43 (41.63 to 49.58)	0.0146
Time	24.0 ,	27.64 (24.09 to 31.72)	0.0264
Time	48.0 ,	71.38 (62.63 to 81.34)	0.0195
Time	72.0 ,	38.63 (32.26 to 46.25)	0.0313
Time	120.0 ,	2.482 (2.357 to 2.613)	0.0361
	168.0 ,	1.806 (1.645 to 1.983)	0.0997

<u>CCL3 1419561 at (macrophage, monocyte and neutrophil chemoattractant)</u>			
	0.0 ,	0.677 (0.264 to 1.736)	0.75
Time	3.0 ,	113.3 (98.49 to 130.4)	0.0189
Time	6.0 ,	174.9 (160 to 191.1)	0.0109
Time	24.0 ,	603.9 (463.6 to 786.7)	0.0263
Time	48.0 ,	294.4 (268.9 to 322.4)	0.0102
Time	72.0 ,	229.7 (151.1 to 349.1)	0.0489
Time	120.0 ,	8.812 (7.777 to 9.984)	0.0365
	168.0 ,	3.306 (2.125 to 5.145)	0.225

CCL GENE DOWNREGULATED DURING OM

Time in hrs	Fold change (range)	Significance
<u>CCL27 1434962_x_at (t-cell chemoattractant)</u>		
0.0 ,	1 (0.971 to 1.029)	0.991
3.0 ,	0.817 (0.733 to 0.911)	0.315
6.0 ,	0.584 (0.517 to 0.659)	0.142
24.0 ,	0.605 (0.55 to 0.665)	0.118
Time 48.0 ,	0.532 (0.525 to 0.538)	0.0123
72.0 ,	0.692 (0.61 to 0.787)	0.213
120.0 ,	0.945 (0.872 to 1.025)	0.612
168.0 ,	0.86 (0.757 to 0.976)	0.444

CCL GENES NOT SIGNIFICANTLY REGULATED DURING OM

CCL1	(TCA3; t-cell chemoattractant)
CCL19	(MIP-3 β ; dendritic cell and t-cell chemoattractant)
CCL21B	(SLC; dendritic cell and t-cell chemoattractant)
CCL24	(Eotaxin-3; eosinophil and basophil chemoattractant)
CCL25	(TECK; t-cell chemoattractant)

CCL GENES NOT FOUND ON THE AFFYMETRIX ARRAY

CCL26	NOT ON THE ARRAY (eosinophil and basophil chemoattractant)
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OTHER

CCL10	TERM NO LONGER IN USE (now CCL9 in both human and mouse)
CCL13	NO MOUSE HOMOLOGUE
CCL14	NONFUNCTIONAL GENE IN MOUSE
CCL15	NONFUNCTIONAL GENE IN MOUSE
CCL16	NO MOUSE HOMOLOGUE
CCL18	NO MOUSE HOMOLOGUE
CCL23	NO MOUSE HOMOLOGUE