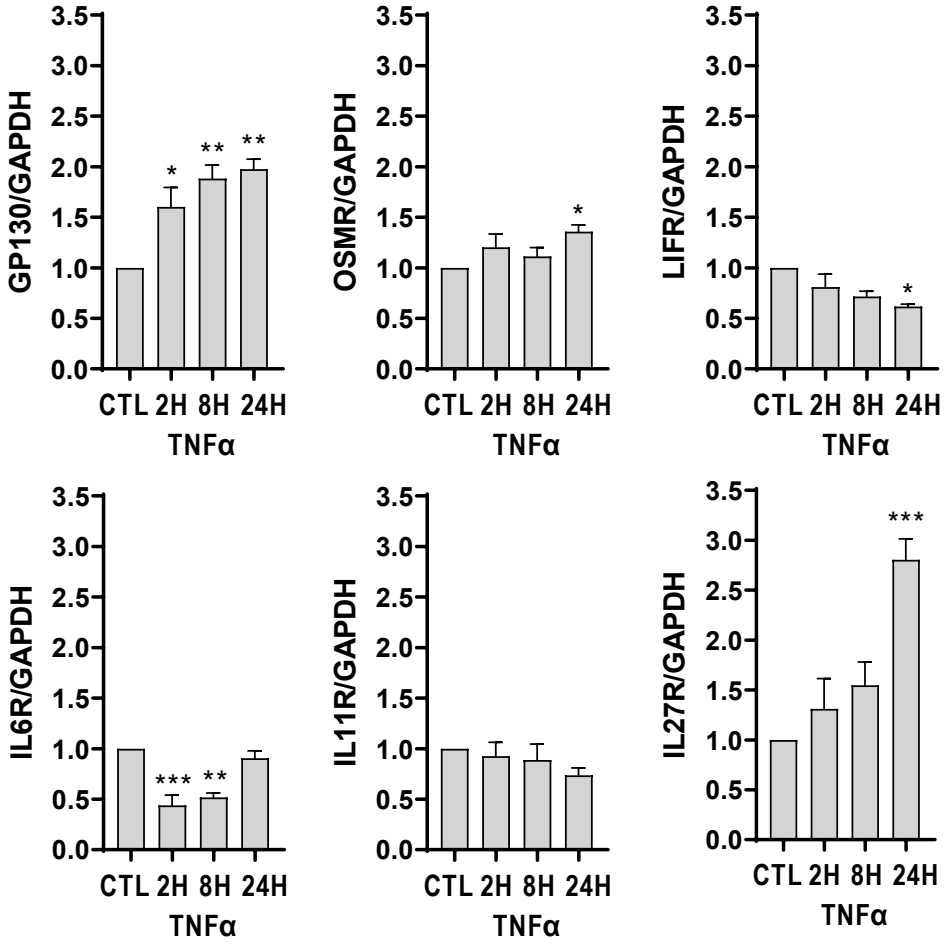
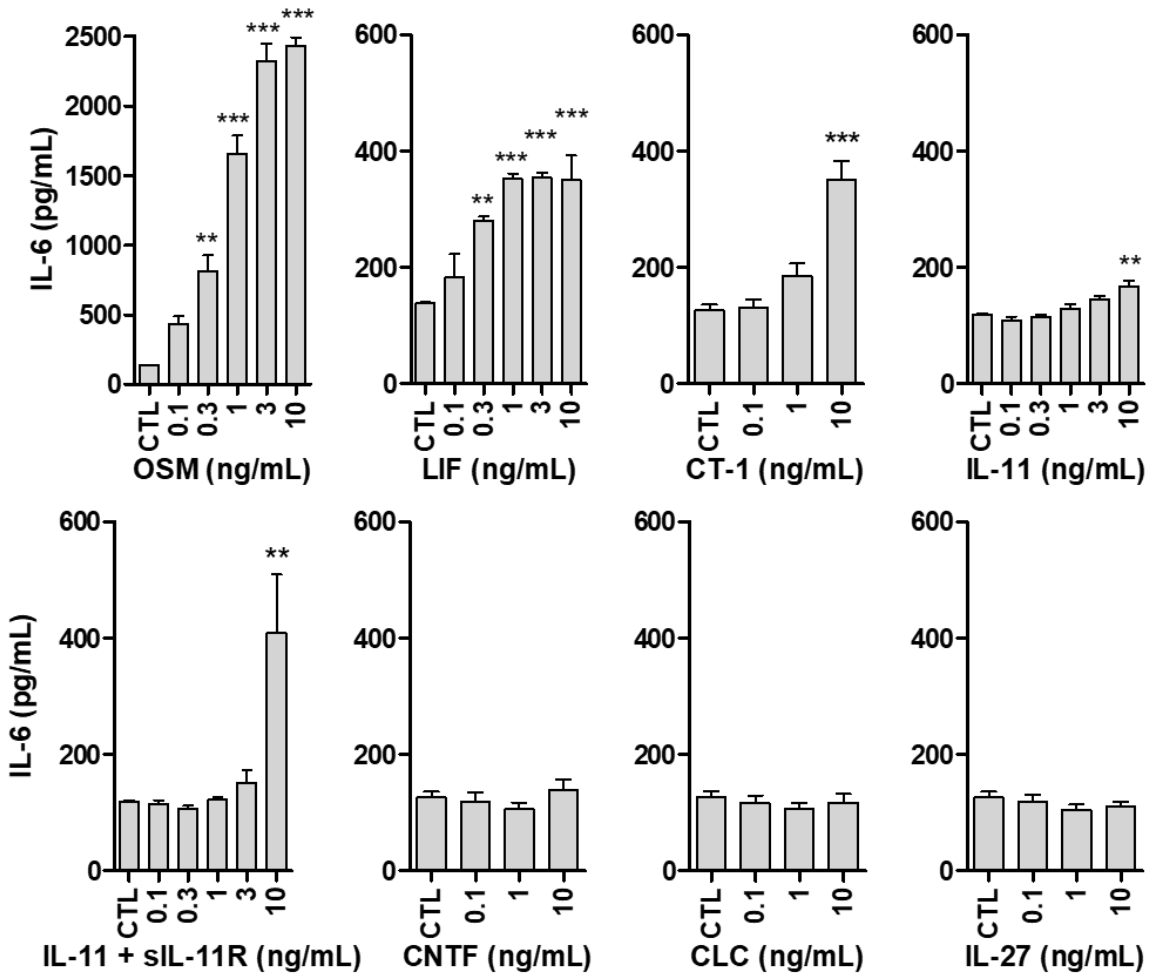
Supplementary Materials



Supplementary Figure S1. Gene expression of IL6-family cytokine receptors in human endothelial cells after exposure to tumor necrosis factor alpha (TNFα). Human endothelial cells were exposed to TNFα 10ng/ml for 2-24 hours. Gene expression was analysed using Taqman quantitative PCR. Data was normalized to GAPDH, and untreated controls were set to 1. Data shown are mean ± SEM from 3 independent experiments run in duplicate. Statistical significance was calculated using One-way ANOVA followed by Dunnet´s post hoc test. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.



Supplementary Figure S2. Dose-response relationship of IL-6 family cytokines and release of interleukin-6 from human endothelial cells. Human endothelial cells were exposed to oncostatin M (OSM), leukemia inhibitory factor (LIF), cardiotrophin 1 (CT-1), interleukin-11 alone (IL-11) and in combination with soluble IL11-receptor (IL11 + R), ciliary neurotrophic factor (CNTF), cardiotrophin-like cytokine (CLC) or interleukin 27 for 48h. Release of IL6 was measured in cell supernatant using ELISA. Data shown are mean ± SEM from 3 independent experiments run in duplicate. Statistical significance was calculated using One-way ANOVA followed by Dunnet´s post hoc test. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Materials and Methods

ELISA

Enzyme-linked immunosorbent assay (ELISA, DuoSet®, Bio-techne) was used to measure the release of IL-6 as a response to increasing concentration of OSM, LIF, CT-1, CLC, CNTF, IL-27, IL-11, sIL-11R. The analysis was performed according to the manufacturer's instructions. Absorbance was measured at 450nm using Cytation 3 imaging reader (BioTek, Winooski, VT, USA).

Taqman primers/probes

Taqman primer/probes	
CCL23	Hs00270756_m1
CNTFR	Hs00181798_m1
GAPDH	Hs99999905_m1
HGF	Hs00300159_m1
IL11RA	Hs00234415_m1
IL27RA	Hs00945029_m1
IL6	Hs00174131_m1
IL6R	Hs01075664_m1
IL6ST (gp130)	Hs00174360_m1
LIFR	Hs01123581_m1
OSMR	Hs00384276_m1
SOCS3	Hs02330328_m1
STAT3	Hs00374280_m1

Supplementary Table S1

	Uniprot ID	OSM				LIF				CT-1				IL-6 + sIL6R				IL-11 + sIL11R				IL-6				IL-11				CNTF				CLC				IL-27			
		FC	SD	p	FDR	FC	SD	p	FDR	FC	SD	p	FDR	FC	SD	p	FDR	FC	SD	p	FDR	FC	SD	p	FDR	FC	SD	p	FDR	FC	SD	p	FDR	FC	SD	p	FDR	FC	SD	p	FDR
CCL23	P55773	5.04	0.43	0.004	**0.062**	2.29	0.15	0.002	**0.051**	2.47	0.39	0.012	0.171	4.17	0.57	0.009	**0.065**	2.56	0.24	0.004	0.147	1.83	0.57	0.046	0.460	1.61	0.38	0.026	0.252	0.77	0.18	0.030	0.220	-0.20	0.71	0.724	0.853	0.24	0.42	0.502	0.996
HGF	P14210	4.75	0.32	0.002	**0.052**	3.23	0.20	0.002	**0.051**	3.41	0.25	0.003	**0.095**	3.22	0.19	0.002	**0.025**	2.92	0.33	0.006	0.147	1.88	0.34	0.016	0.271	2.03	0.31	0.011	0.252	1.05	0.04	0.001	**0.050**	-0.22	0.43	0.549	0.853	0.14	0.50	0.736	0.996
IL6	P05231	4.72	0.24	0.001	**0.045**	2.12	0.24	0.006	**0.054**	2.37	0.34	0.010	0.171	-	-	-	-	2.66	0.13	0.001	**0.084**	-	-	-	-	1.38	0.45	0.050	0.252	0.49	0.15	0.045	0.241	-0.15	0.14	0.278	0.853	0.01	0.61	0.985	0.996
TR-AP	P13686	2.93	0.41	0.010	**0.087**	1.48	0.43	0.04	0.123	1.41	0.37	0.032	0.188	2.90	0.55	0.017	**0.094**	1.68	0.32	0.018	0.230	0.96	0.73	0.204	0.512	0.54	0.32	0.140	0.327	0.16	0.08	0.095	0.335	-0.41	0.56	0.408	0.853	-0.16	0.18	0.335	0.996
MCP-1	P13500	2.55	0.41	0.013	**0.087**	1.00	0.38	0.065	0.151	1.08	0.49	0.090	0.292	2.47	0.34	0.009	**0.065**	1.69	0.34	0.02	0.230	0.74	0.58	0.211	0.512	0.50	0.29	0.134	0.327	-0.01	0.33	0.957	0.981	-0.23	0.52	0.596	0.853	-0.13	0.44	0.711	0.996
CXCL11	O14625	1.96	0.54	0.035	0.130	1.34	0.43	0.047	0.123	1.54	0.37	0.028	0.185	1.45	0.46	0.048	0.136	1.07	0.60	0.129	0.325	0.97	0.15	0.012	0.271	1.43	0.10	0.003	0.176	0.83	0.39	0.094	0.335	0.10	0.56	0.834	0.871	0.58	0.36	0.148	0.996
CXCL5	P42830	1.88	0.38	0.020	0.100	0.74	0.23	0.046	0.123	0.92	0.46	0.105	0.304	1.81	0.42	0.026	0.124	0.8	0.38	0.095	0.325	0.73	0.16	0.022	0.271	0.79	0.37	0.096	0.308	0.18	0.15	0.236	0.636	-0.09	0.43	0.784	0.853	0.28	0.24	0.237	0.996
MCP-3	P80098	1.77	0.32	0.016	**0.087**	1.22	0.20	0.014	**0.079**	1.40	0.33	0.027	0.185	1.72	0.22	0.008	**0.065**	1.33	0.35	0.033	0.298	0.72	0.16	0.023	0.271	1.21	0.33	0.035	0.252	0.40	0.06	0.012	0.166	-0.14	0.30	0.58	0.853	-0.02	0.47	0.948	0.996
MCP-2	P80075	1.64	0.43	0.033	0.129	0.87	0.45	0.114	0.215	0.83	0.45	0.120	0.304	1.19	0.47	0.070	0.160	0.61	0.40	0.165	0.377	0.39	0.30	0.206	0.512	0.67	0.27	0.073	0.299	0.22	0.09	0.078	0.335	-0.12	0.40	0.72	0.853	0.19	0.27	0.427	0.996
TRAIL	P50591	1.56	0.24	0.011	**0.087**	0.84	0.09	0.005	**0.054**	1.05	0.24	0.026	0.185	1.46	0.36	0.029	0.124	0.81	0.26	0.047	0.298	0.66	0.36	0.122	0.512	0.91	0.32	0.058	0.253	0.31	0.10	0.045	0.241	-0.23	0.48	0.568	0.853	0.19	0.27	0.437	0.996
OPG	O00300	1.34	0.47	0.058	0.171	0.88	0.13	0.01	**0.075**	0.92	0.23	0.029	0.185	1.09	0.33	0.043	0.136	0.68	0.32	0.099	0.325	0.51	0.25	0.103	0.512	1.09	0.31	0.038	0.252	0.32	0.08	0.029	0.215	-0.23	0.36	0.466	0.853	0.13	0.53	0.769	0.996
CSF-1	P09603	0.94	0.20	0.021	0.100	1.09	0.18	0.013	**0.079**	1.17	0.18	0.012	0.171	0.92	0.25	0.036	0.136	0.92	0.34	0.062	0.325	0.47	0.30	0.158	0.512	1.19	0.25	0.021	0.252	0.46	0.06	0.008	0.148	-0.20	0.36	0.506	0.853	0.18	0.45	0.625	0.996
TWEAK	O43508	0.91	0.36	0.069	0.171	0.69	0.13	0.016	**0.089**	0.80	0.04	0.002	**0.095**	0.81	0.42	0.114	0.195	0.62	0.32	0.114	0.325	0.48	0.40	0.231	0.512	1.08	0.37	0.054	0.252	0.32	0.14	0.087	0.335	-0.17	0.46	0.647	0.853	0.08	0.65	0.874	0.996
IGFBP-1	P08833	0.66	0.17	0.032	0.129	0.37	0.14	0.063	0.151	0.35	0.19	0.121	0.304	1.30	0.32	0.03	0.124	0.48	0.15	0.045	0.298	0.46	0.30	0.160	0.512	0.33	0.20	0.145	0.327	0.05	0.35	0.857	0.981	-0.17	0.35	0.569	0.853	-0.06	0.26	0.788	0.996
CCL15	Q16663	0.60	0.15	0.028	0.123	0.23	0.13	0.138	0.242	0.10	0.20	0.539	0.648	1.13	0.44	0.068	0.160	0.26	0.14	0.118	0.325	0.37	0.06	0.012	0.271	0.08	0.12	0.474	0.593	-0.01	0.05	0.760	0.981	-0.09	0.06	0.176	0.853	-0.07	0.05	0.226	0.996
IL-18R1	Q13478	0.58	0.32	0.122	0.249	0.63	0.12	0.019	**0.091**	0.74	0.23	0.043	0.233	0.61	0.30	0.102	0.193	0.45	0.30	0.171	0.377	0.4	0.27	0.165	0.512	0.93	0.31	0.052	0.252	0.20	0.12	0.140	0.446	-0.22	0.17	0.202	0.853	0.02	0.54	0.971	0.996
CXCL16	Q9H2A7	0.51	0.05	0.005	**0.067**	0.28	0.06	0.02	**0.091**	0.27	0.12	0.085	0.292	1.01	0.32	0.047	0.136	0.34	0.09	0.036	0.298	0.4	0.29	0.197	0.512	0.25	0.12	0.100	0.308	0.12	0.38	0.711	0.981	-0.18	0.48	0.641	0.853	-0.02	0.28	0.940	0.996
CXCL6	P80162	0.50	0.27	0.119	0.249	0.60	0.44	0.194	0.309	0.77	0.66	0.238	0.462	0.56	0.38	0.174	0.249	0.31	0.83	0.65	0.785	0.33	0.16	0.096	0.512	1.04	0.51	0.101	0.308	0.23	0.17	0.193	0.563	0.08	0.37	0.792	0.853	0.44	0.26	0.137	0.996
IGFBP-7	Q16270	0.48	0.32	0.163	0.292	0.59	0.15	0.03	0.118	0.54	0.19	0.054	0.250	1.59	0.40	0.03	0.124	0.78	0.24	0.046	0.298	0.74	0.57	0.209	0.512	0.55	0.56	0.300	0.482	0.09	0.56	0.842	0.981	-0.35	0.83	0.612	0.853	-0.08	0.62	0.871	0.996
CDCP1	Q9H5V8	0.44	0.44	0.293	0.428	0.54	0.05	0.004	**0.054**	0.67	0.15	0.024	0.185	0.32	0.06	0.017	**0.094**	0.39	0.22	0.127	0.325	0.25	0.16	0.155	0.512	0.90	0.42	0.096	0.308	0.24	0.24	0.289	0.750	-0.15	0.19	0.37	0.853	0.06	0.37	0.848	0.996
Flt3L	P49771	0.42	0.40	0.281	0.425	0.42	0.11	0.033	0.121	0.51	0.23	0.092	0.292	0.53	0.23	0.081	0.163	0.38	0.13	0.058	0.325	0.29	0.21	0.185	0.512	0.93	0.49	0.116	0.327	0.42	0.11	0.031	0.215	-0.11	0.30	0.67	0.853	0.16	0.62	0.752	0.996
TFPI	P10646	0.40	0.26	0.161	0.292	0.51	0.11	0.022	**0.095**	0.50	0.21	0.081	0.292	1.12	0.38	0.053	0.144	0.67	0.28	0.077	0.325	0.56	0.44	0.209	0.512	0.46	0.41	0.254	0.479	0.09	0.44	0.800	0.981	-0.35	0.76	0.578	0.853	0.01	0.49	0.975	0.996
IL-18BP	O95998	0.35	0.14	0.072	0.171	0.13	0.16	0.389	0.484	0.21	0.18	0.239	0.462	0.76	0.30	0.069	0.160	0.29	0.05	0.017	0.230	0.35	0.25	0.191	0.512	0.05	0.05	0.276	0.482	-0.13	0.31	0.622	0.981	-0.17	0.36	0.563	0.853	-0.11	0.25	0.606	0.996
CXCL1	P09341	0.29	0.47	0.478	0.587	0.37	0.15	0.072	0.157	0.27	0.21	0.212	0.436	0.43	0.26	0.149	0.232	0.2	0.28	0.430	0.636	0.15	0.13	0.234	0.512	0.67	0.29	0.085	0.308	0.08	0.01	0.014	0.166	-0.06	0.20	0.735	0.853	0.08	0.30	0.747	0.996
TNF-R1	P19438	0.24	0.32	0.396	0.504	0.51	0.08	0.011	**0.075**	0.34	0.43	0.377	0.535	0.80	0.26	0.049	0.136	0.57	0.29	0.108	0.325	0.54	0.44	0.222	0.512	0.43	0.36	0.228	0.47	0.07	0.48	0.850	0.981	-0.41	0.69	0.489	0.853	-0.29	0.51	0.501	0.996
GRN	P28799	0.24	0.24	0.285	0.425	0.39	0.04	0.006	**0.054**	0.32	0.17	0.115	0.304	0.90	0.26	0.041	0.136	0.47	0.22	0.092	0.325	0.42	0.39	0.265	0.512	0.35	0.35	0.294	0.482	0.05	0.35	0.847	0.981	-0.27	0.54	0.556	0.853	-0.01	0.43	0.987	0.996
SELP	P16109	0.16	0.19	0.367	0.501	0.26	0.21	0.213	0.324	0.13	0.28	0.586	0.684	0.63	0.44	0.181	0.253	0.27	0.14	0.106	0.325	0.31	0.27	0.248	0.512	0.11	0.13	0.343	0.509	0.01	0.05	0.789	0.981	-0.08	0.23	0.679	0.853	-0.08	0.09	0.33	0.996
GDF-15	Q99988	0.13	0.31	0.626	0.718	0.47	0.14	0.042	0.123	0.44	0.22	0.106	0.304	0.90	0.29	0.048	0.136	0.58	0.30	0.115	0.325	0.58	0.40	0.177	0.512	0.48	0.44	0.260	0.479	0.22	0.47	0.566	0.981	-0.24	0.67	0.664	0.853	-0.04	0.52	0.929	0.996
LTBR	P36941	0.08	0.10	0.372	0.501	0.10	0.14	0.401	0.484	0.25	0.13	0.120	0.304	0.58	0.09	0.011	**0.068**	0.18	0.09	0.106	0.325	0.22	0.33	0.449	0.605	0.12	0.32	0.644	0.716	0.15	0.08	0.124	0.415	-0.06	0.18	0.686	0.853	0.03	0.18	0.839	0.996
MMP-1	P03956	0.05	0.25	0.798	0.846	-0.32	0.03	0.003	**0.054**	-0.19	0.08	0.083	0.292	0.11	0.22	0.557	0.629	-0.01	0.10	0.904	0.958	0.02	0.05	0.621	0.724	-0.42	0.24	0.131	0.327	-0.14	0.26	0.538	0.981	0.17	0.10	0.152	0.853	0.04	0.32	0.860	0.996
EPHB4	P54760	0.02	0.01	0.197	0.328	0.25	0.07	0.036	0.123	0.17	0.11	0.147	0.322	0.58	0.32	0.125	0.208	0.17	0.13	0.205	0.395	0.21	0.21	0.291	0.512	0.25	0.25	0.303	0.482	-0.16	0.31	0.551	0.981	-0.43	0.59	0.409	0.853	-0.08	0.18	0.572	0.996
ST2	Q01638	0.01	0.48	0.969	0.969	0.40	0.27	0.167	0.279	0.33	0.14	0.080	0.292	0.73	0.35	0.099	0.192	0.45	0.18	0.073	0.325	0.41	0.47	0.343	0.523	0.45	0.55	0.364	0.509	0.01	0.31	0.978	0.981	-0.28	0.48	0.490	0.853	-0.06	0.40	0.859	0.996
TRANCE	O14788	-0.02	0.16	0.879	0.905	0.41	0.16	0.071	0.157	0.29	0.34	0.349	0.520	-0.43	0.03	0.002	**0.025**	0.21	0.47	0.593	0.740	-0.07	0.32	0.777	0.837	0.73	0.11	0.010	0.252	0.18	0.12	0.167	0.507	-0.09	0.26	0.659	0.853	0.19	0.34	0.503	0.996
IL-15RA	Q13261	-0.03	0.32	0.900	0.913	0.13	0.16	0.369	0.470	0.33	0.11	0.049	0.245	1.72	0.18	0.005	**0.054**	0.16	0.29	0.506	0.694	0.09	0.27	0.685	0.779	0.30	0.13	0.082	0.308	0.06	0.16	0.669	0.981	-0.01	0.08	0.897	0.91	0.08	0.24	0.689	0.996
IL-10RB	Q08334	-0.07	0.24	0.738	0.794	0.20	0.31	0.465	0.525	0.24	0.20	0.244	0.462	0.02	0.07	0.736	0.780	0.1	0.17	0.481	0.674	0.12	0.19	0.479	0.633	0.42	0.12	0.038	0.252	0.13	0.38	0.671	0.981	-0.01	0.13	0.887	0.91	0.07	0.21	0.679	0.996
CD93	Q9NPY3	-0.07	0.24	0.719	0.787	0.31	0.01	0.001	**0.049**	0.23	0.23	0.300	0.488	0.62	0.27	0.081	0.163	0.37	0.24	0.159	0.377	0.28	0.47	0.49	0.635	0.35	0.42	0.363	0.509	-0.03	0.33	0.914	0.981	-0.36	0.55	0.453	0.853	-0.07	0.49	0.855	0.996
PLC	P98160	-0.08	0.29	0.719	0.787	0.34	0.11	0.053	0.133	0.25	0.25	0.281	0.488	0.41	0.27	0.170	0.247	0.34	0.23	0.175	0.377	0.25	0.31	0.373	0.544	0.31	0.34	0.327	0.498	0.04	0.25	0.863	0.981	-0.31	0.51	0.477	0.853	0.05	0.39	0.875	0.996
LAP TGF-beta-1	P01137	-0.09	0.54	0.836	0.874	0.67	0.21	0.045	0.123	0.61	0.13	0.023	0.185	0.06	0.36	0.845	0.858	0.13	0.56	0.777	0.892	0.33	0.24	0.192	0.512	1.16	0.29	0.029	0.252	0.34	0.16	0.096	0.335	-0.14	0.37	0.655	0.853	0.24	0.44	0.525	0.996
SCF	P21583	-0.10	0.20	0.563	0.657	0.15	0.08	0.12	0.222	0.27	0.21	0.212	0.436	0.02	0.12	0.829	0.853	0.04	0.23	0.830	0.907	0.13	0.14	0.323	0.513	0.61	0.34	0.130	0.327	0.11	0.16	0.436	0.954	0.04	0.06	0.467	0.853	0.09	0.34	0.747	0.996
CTSZ	Q9UBR2	-0.10	0.16	0.461	0.576	0.14	0.04	0.041	0.123	0.10	0.15	0.468	0.589	0.45	0.24	0.114	0.195	0.17	0.13	0.213	0.395	0.29	0.30	0.30	0.512	0.29	0.25	0.247	0.479	0.03	0.31	0.915	0.981	-0.16	0.45	0.663	0.853	-0.02	0.34	0.943	0.996
ICAM-2	P13598	-0.11	0.32	0.682	0.770	0.24	0.14	0.136	0.242	0.15	0.25	0.479	0.589	0.59	0.24	0.073	0.160	0.18	0.21	0.356	0.567	0.39	0.38	0.284	0.512	0.31	0.39	0.373	0.512	-0.01	0.37	0.981	0.981	-0.33	0.56	0.491	0.853	-0.06	0.33	0.812	0.996
MPO	P05164	-0.11	0.14	0.392	0.504	-0.14	0.10	0.185	0.302	-0.08	0.16	0.546	0.648	-0.05	0.06	0.336	0.399	-0.04	0.10	0.603	0.740	-0.09	0.10	0.344	0.523	-0.05	0.14	0.632	0.714	-0.04	0.13	0.694	0.981	-0.08	0.17	0.576	0.853	0.02	0.12	0.867	0.996

Supplementary Table S1 (continued)

	Uniprot ID	OSM				LIF				CT-1				IL-6+R				IL-11 + sIL11R				IL-6				IL-11				CNTF				CLC				IL-27			
		FC	SD	p	FDR	FC	SD	p	FDR	FC	SD	p	FDR	FC	SD	p	FDR	FC	SD	p	FDR	FC	SD	p	FDR	FC	SD	p	FDR	FC	SD	p	FDR	FC	SD	p	FDR	FC	SD	p	FDR
PDGF subunit A	P04085	-0.11	0.22	0.550	0.653	0.20	0.10	0.108	0.215	0.15	0.14	0.274	0.488	0.36	0.23	0.153	0.233	0.19	0.15	0.210	0.395	0.28	0.28	0.288	0.512	0.30	0.30	0.294	0.482	0.02	0.34	0.949	0.981	-0.16	0.43	0.647	0.853	-0.08	0.44	0.827	0.996
ALCAM	Q13740	-0.14	0.10	0.190	0.324	0.14	0.14	0.309	0.424	0.08	0.14	0.479	0.589	0.29	0.22	0.204	0.269	0.11	0.18	0.453	0.647	0.21	0.28	0.41	0.583	0.13	0.22	0.486	0.595	-0.05	0.27	0.806	0.981	-0.25	0.26	0.298	0.853	-0.03	0.25	0.887	0.996
U-PAR	Q03405	-0.16	0.30	0.542	0.653	0.24	0.05	0.023	**0.095**	0.26	0.11	0.083	0.292	0.51	0.26	0.109	0.195	0.34	0.24	0.178	0.377	0.29	0.40	0.416	0.583	0.33	0.42	0.386	0.520	-0.05	0.38	0.876	0.981	-0.26	0.52	0.553	0.853	-0.09	0.48	0.821	0.996
TNFRSF10C	O14798	-0.21	0.07	0.050	0.168	-0.07	0.10	0.439	0.512	-0.19	0.24	0.387	0.535	0.45	0.18	0.072	0.160	0.06	0.11	0.526	0.695	0.39	0.28	0.183	0.512	0.02	0.04	0.632	0.714	-0.06	0.27	0.799	0.981	-0.23	0.39	0.495	0.853	-0.13	0.51	0.751	0.996
TFF3	Q07654	-0.23	0.13	0.124	0.249	-0.02	0.23	0.911	0.911	-0.14	0.14	0.297	0.488	0.46	0.15	0.048	0.136	0.00	0.16	0.997	0.997	0.33	0.30	0.260	0.512	0.05	0.34	0.858	0.884	-0.01	0.24	0.961	0.981	-0.09	0.41	0.780	0.853	-0.10	0.33	0.721	0.996
MMP-2	P08253	-0.23	0.09	0.065	0.171	0.17	0.05	0.046	0.123	0.13	0.14	0.322	0.501	0.41	0.21	0.108	0.195	0.16	0.14	0.249	0.405	0.33	0.35	0.321	0.513	0.29	0.29	0.297	0.482	-0.04	0.32	0.881	0.981	-0.29	0.56	0.544	0.853	-0.14	0.39	0.659	0.996
IGFBP-2	P18065	-0.24	0.31	0.390	0.504	0.28	0.13	0.097	0.200	0.2	0.32	0.473	0.589	0.72	0.42	0.136	0.222	0.32	0.24	0.203	0.395	0.50	0.42	0.236	0.512	0.44	0.35	0.216	0.459	0.06	0.52	0.888	0.981	-0.35	0.73	0.571	0.853	0.04	0.52	0.921	0.996
PECAM-1	P16284	-0.24	0.12	0.108	0.236	-0.11	0.10	0.239	0.356	-0.01	0.19	0.971	0.997	0.28	0.17	0.143	0.227	0.06	0.12	0.591	0.740	0.11	0.25	0.612	0.724	0.07	0.17	0.62	0.714	-0.14	0.18	0.394	0.927	-0.45	0.15	0.053	0.853	-0.17	0.18	0.313	0.996
CD40	P25942	-0.29	0.12	0.078	0.175	0.07	0.25	0.718	0.758	0.18	0.24	0.389	0.535	0.09	0.22	0.610	0.678	0.00	0.34	0.991	0.997	0.07	0.24	0.712	0.779	0.61	0.33	0.118	0.327	-0.02	0.12	0.809	0.981	-0.27	0.42	0.462	0.853	0.02	0.39	0.955	0.996
CD163	Q86VB7	-0.30	0.12	0.073	0.171	-0.22	0.19	0.247	0.361	-0.4	0.23	0.131	0.315	0.05	0.20	0.763	0.797	-0.34	0.17	0.099	0.325	-0.05	0.34	0.847	0.899	-0.62	0.15	0.028	0.252	0.10	0.08	0.221	0.618	0.07	0.22	0.704	0.853	0.07	0.18	0.614	0.996
JAM-A	Q9Y624	-0.31	0.33	0.309	0.441	0.05	0.27	0.830	0.842	-0.02	0.30	0.942	0.984	0.73	0.02	0.000	**0.014**	0.01	0.15	0.949	0.977	0.26	0.26	0.294	0.512	0.08	0.20	0.612	0.714	-0.27	0.38	0.425	0.954	-0.44	0.33	0.205	0.853	-0.12	0.31	0.635	0.996
CST5	P28325	-0.33	0.38	0.351	0.491	-0.16	0.33	0.572	0.626	-0.16	0.45	0.660	0.757	0.08	0.07	0.255	0.319	-0.35	0.20	0.130	0.325	0.12	0.23	0.535	0.668	0.16	0.55	0.711	0.754	0.21	0.07	0.048	0.241	-0.06	0.22	0.754	0.853	0.08	0.36	0.776	0.996
PD-L1	Q9NZQ7	-0.33	0.27	0.221	0.352	0.24	0.15	0.151	0.258	0.22	0.14	0.146	0.322	0.08	0.22	0.649	0.709	0.15	0.44	0.675	0.801	0.06	0.20	0.697	0.779	0.67	0.21	0.048	0.252	0.16	0.02	0.007	0.148	0.05	0.11	0.576	0.853	0.05	0.47	0.884	0.996
LDL receptor	P01130	-0.40	0.06	0.010	**0.087**	-0.03	0.05	0.486	0.540	-0.11	0.39	0.726	0.806	0.13	0.12	0.254	0.319	-0.23	0.19	0.217	0.395	0.23	0.19	0.235	0.512	-0.11	0.19	0.493	0.595	-0.04	0.47	0.926	0.981	0.02	0.52	0.969	0.969	0.00	0.44	0.996	0.996
IL8	P10145	-0.40	0.36	0.256	0.397	0.02	0.08	0.796	0.819	0.02	0.09	0.760	0.819	-0.29	0.21	0.187	0.256	-0.22	0.18	0.232	0.405	-0.01	0.11	0.946	0.946	0.45	0.33	0.187	0.409	0.05	0.11	0.570	0.981	-0.10	0.15	0.468	0.853	-0.05	0.45	0.900	0.996
IL-6RA	P08887	-0.41	0.23	0.133	0.258	-0.15	0.13	0.255	0.364	0.00	0.13	0.994	0.997	-	-	-	-	0.04	0.22	0.813	0.907	0.03	0.41	0.935	0.946	-0.03	0.39	0.924	0.938	-0.11	0.38	0.723	0.981	-0.37	0.88	0.610	0.853	-0.18	0.30	0.495	0.996
PAI	P05121	-0.48	0.19	0.071	0.171	0.15	0.08	0.110	0.215	0.10	0.11	0.304	0.488	0.19	0.14	0.201	0.269	0.10	0.12	0.387	0.603	0.20	0.20	0.300	0.512	0.28	0.30	0.315	0.489	0.03	0.13	0.782	0.981	-0.16	0.29	0.523	0.853	0.00	0.15	0.990	0.996
MMP-10	P09238	-0.60	0.44	0.189	0.324	0.19	0.25	0.399	0.484	0.11	0.16	0.429	0.577	-0.37	0.35	0.271	0.333	-0.32	0.47	0.436	0.636	0.12	0.27	0.586	0.708	0.71	0.21	0.042	0.252	0.21	0.05	0.027	0.215	-0.08	0.36	0.783	0.853	0.17	0.52	0.694	0.996
4E-BP1	Q13541	-0.69	0.10	0.011	**0.087**	-0.19	0.66	0.726	0.758	0.00	0.80	0.997	0.997	-0.44	0.38	0.236	0.306	0.16	0.92	0.826	0.907	-0.99	1.05	0.314	0.513	0.55	0.88	0.467	0.593	-0.53	0.64	0.361	0.903	-0.49	0.76	0.461	0.853	-0.28	0.79	0.663	0.996
STAMBP	O95630	-0.72	0.54	0.203	0.330	-0.46	0.71	0.454	0.521	-0.50	0.80	0.470	0.589	-0.20	0.26	0.399	0.466	-0.40	0.80	0.556	0.721	-0.30	0.43	0.434	0.595	-0.21	0.69	0.708	0.754	-0.08	0.27	0.701	0.981	0.04	0.23	0.824	0.871	-0.01	0.35	0.961	0.996
t-PA	P00750	-0.79	0.48	0.145	0.275	0.16	0.23	0.421	0.499	0.06	0.33	0.833	0.883	0.35	0.37	0.311	0.375	0.11	0.41	0.734	0.856	0.38	0.48	0.373	0.544	0.36	0.55	0.449	0.593	-0.02	0.49	0.969	0.981	-0.43	0.76	0.503	0.853	-0.05	0.62	0.920	0.996
CSTB	P04080	-0.82	0.24	0.041	0.145	-0.25	0.25	0.298	0.417	-0.29	0.30	0.307	0.488	0.35	0.15	0.080	0.163	-0.17	0.14	0.220	0.395	-0.03	0.38	0.922	0.946	-0.12	0.35	0.670	0.733	-0.36	0.10	0.039	0.241	-0.41	0.41	0.292	0.853	0.05	0.21	0.759	0.996
CASP-3	P42574	-0.86	0.15	0.014	**0.087**	-0.28	0.33	0.359	0.467	-0.27	0.35	0.390	0.535	0.08	0.22	0.667	0.718	-0.02	0.13	0.844	0.909	-0.35	0.74	0.568	0.698	0.09	0.50	0.831	0.868	-0.56	0.07	0.007	0.148	-0.59	0.39	0.166	0.853	-0.30	0.28	0.270	0.996
uPA	P00749	-0.91	0.35	0.068	0.171	-0.05	0.06	0.360	0.467	-0.08	0.07	0.253	0.466	-0.22	0.15	0.169	0.247	-0.26	0.23	0.242	0.405	0.03	0.30	0.914	0.946	0.41	0.35	0.239	0.479	-0.11	0.15	0.397	0.927	-0.35	0.31	0.257	0.853	0.00	0.39	0.990	0.996
ADA	P00813	-0.93	0.02	0.000	**0.016**	-0.14	0.46	0.701	0.755	-0.12	0.43	0.736	0.806	-0.37	0.15	0.073	0.160	-0.22	0.40	0.519	0.695	-0.44	0.40	0.264	0.512	0.43	0.51	0.359	0.509	-0.38	0.60	0.465	0.981	-0.55	0.57	0.307	0.853	-0.24	0.72	0.686	0.996
AXL	P30530	-0.96	0.38	0.070	0.171	0.14	0.16	0.335	0.450	0.06	0.24	0.737	0.806	0.02	0.36	0.942	0.942	0.01	0.25	0.947	0.977	0.25	0.45	0.504	0.641	0.31	0.49	0.465	0.593	0.09	0.39	0.766	0.981	-0.24	0.55	0.604	0.853	-0.03	0.48	0.937	0.996
FABP4	P15090	-1.12	0.40	0.059	0.171	-0.43	0.18	0.079	0.168	-0.67	0.40	0.143	0.322	-0.08	0.16	0.534	0.612	-0.25	0.34	0.415	0.631	0.06	0.19	0.702	0.779	0.00	0.09	0.992	0.992	-0.49	0.19	0.068	0.316	-0.61	0.53	0.242	0.853	-0.02	0.12	0.847	0.996
CCL20	P78556	-1.42	0.26	0.016	**0.087**	-0.80	0.60	0.201	0.312	-0.53	0.61	0.344	0.52	-0.37	0.03	0.004	**0.046**	-0.75	0.65	0.244	0.405	-0.20	0.17	0.247	0.512	0.31	0.19	0.144	0.327	0.07	0.32	0.793	0.981	0.11	0.32	0.671	0.853	0.25	0.27	0.331	0.996

Supplementary Table S2

	Enriched Function	p-value for enrichment	Regulated proteins that enriched the function	# Molecules
OSM	Activation of phagocytes	6,69E-11	MCP-1,CCL20,MCP-3,MCP-2,CSF-1,CXCL5,HGF,IL6,TRAIL	9
	Angiogenesis/Vasculogenesis	7,60E-08	ADA,CASP-3,MCP-1,MCP-3,CSF-1,CXCL5,HGF,IGFBP-1,IL6,TRAIL	10
	Binding	2,90E-08	CCL15,MCP-1,CXCL11,HGF,IGFBP-1,IL6	6
	Branching of cells	7,55E-05	CASP-3,MCP-1,4E-BP1,HGF,IL6	5
	Cell movement	2,98E-13	ADA,CCL15,MCP-1,CCL20,CCL23,MCP-3,MCP-2,CSF-1,CXCL11,CXCL5,HGF,IL6,TRAIL	13
	Cell proliferation	3,20E-06	MCP-1,CSF-1,4E-BP1,HGF,IGFBP-1,IL6,TRAIL	7
	Chemotaxis	3,26E-12	CCL15,MCP-1,CCL20,CCL23,MCP-3,MCP-2,CSF-1,CXCL11,CXCL5,HGF,IL6	11
	Differentiation	2,40E-06	MCP-1,CSF-1,HGF,IL6,TRAIL	5
	Endocytosis	4,83E-05	MCP-3,CSF-1,HGF,IL6,TRAIL	5
	Growth	8,85E-06	MCP-1,CSF-1,CXCL5,4E-BP1,HGF,IL6	6
	Invasion	1,62E-06	CASP-3,MCP-1,CSF-1,CXCL11,CXCL5,4E-BP1,HGF,IL6,TRAIL	9
	Migration	8,95E-12	TR-AP,ADA,CCL15,MCP-1,CCL20,CCL23,MCP-3,MCP-2,CSF-1,CXCL11,CXCL5,4E-BP1,HGF,IGFBP-1,IL6,TRAIL	16
	Recruitment	9,98E-13	CCL15,MCP-1,CCL20,CCL23,MCP-3,CSF-1,CXCL11,CXCL5,HGF,IL6	10
	Stimulation	6,51E-14	MCP-1,CCL20,MCP-3,CSF-1,CXCL11,CXCL5,HGF,IL6,TRAIL	9
LIF	Adhesion	1,18E-10	MCP-3,CSF-1,CXCL11,HGF,IL6,LAP TGF-beta-1,OPG,TWEAK	8
	Angiogenesis/Vasculogenesis	6,06E-08	MCP-3,CSF-1,CXCL5,HGF,IGFBP7,IL6,LAP TGF-beta-1,TRAIL,TWEAK	9
	Attraction	7,89E-09	MCP-3,CSF-1,CXCL11,CXCL5,LAP TGF-beta-1	5
	Binding	3,79E-12	MCP-3,CSF-1,CXCL11,HGF,IL-18R1,IL6,LAP TGF-beta-1,OPG,TWEAK	9
	Cell movement	4,65E-12	CCL23,MCP-3,CSF-1,CXCL11,CXCL5,HGF,IL6,LAP TGF-beta-1,OPG,TRAIL,TWEAK	11
	Cell proliferation	1,20E-10	CSF-1,HGF,IGFBP7,IL6,LAP TGF-beta-1,OPG,TRAIL,TWEAK	8
	Chemotaxis	6,98E-09	CCL23,MCP-3,CSF-1,CXCL11,CXCL5,HGF,IL6,LAP TGF-beta-1	8
	Development of vasculature	6,77E-09	MCP-3,CSF-1,CXCL5,HGF,IGFBP7,IL6,LAP TGF-beta-1,OPG,TRAIL,TWEAK	10
	Differentiation	5,84E-07	CSF-1,HGF,IL6,LAP TGF-beta-1,TRAIL	5
	Endocytosis	4,36E-07	MCP-3,CSF-1,HGF,IL6,LAP TGF-beta-1,TRAIL	6
	Mobilization of Ca2+	2,85E-06	CCL23,MCP-3,CXCL5,IL6,LAP TGF-beta-1	5
	Formation	1,32E-07	MCP-3,HGF,IL6,LAP TGF-beta-1,TRAIL	5
	Induction	2,06E-10	CSF-1,HGF,IL-18R1,IL6,LAP TGF-beta-1,TRAIL	6
	Invasion	1,00E-08	CSF-1,CXCL5,HGF,IL6,LAP TGF-beta-1	5
	Migration	2,75E-10	TR-AP,CCL23,MCP-3,CSF-1,CXCL11,CXCL5,HGF,IGFBP7,IL6,LAP TGF-beta-1,OPG,TRAIL,TWEAK	13
	Recruitment	2,22E-12	CCL23,MCP-3,CSF-1,CXCL11,CXCL5,HGF,IL6,LAP TGF-beta-1,TWEAK	9
	Stimulation	2,78E-15	MCP-3,CSF-1,CXCL11,CXCL5,HGF,IL-18R1,IL6,LAP TGF-beta-1,TRAIL	9
CT-1	Adhesion	5,15E-11	MCP-3,CSF-1,CXCL11,HGF,IL6,LAP TGF-beta-1,OPG,TWEAK	8
	Angiogenesis/Vasculogenesis	2,42E-06	MCP-3,CSF-1,HGF,IL6,LAP TGF-beta-1,TRAIL,TWEAK	7
	Binding	1,38E-12	MCP-3,CSF-1,CXCL11,HGF,IL-18R1,IL6,LAP TGF-beta-1,OPG,TWEAK	9
	Cell movement	1,05E-12	CCL23,MCP-3,CDCP1,CSF-1,CXCL11,HGF,IL6,LAP TGF-beta-1,OPG,TRAIL,TWEAK	11
	Cell proliferation	3,22E-09	CSF-1,HGF,IL6,LAP TGF-beta-1,OPG,TRAIL,TWEAK	7
	Chemotaxis	3,09E-09	CCL23,MCP-3,CDCP1,CSF-1,CXCL11,HGF,IL6,LAP TGF-beta-1	8
	Development of vasculature	1,32E-06	MCP-3,CSF-1,HGF,IL6,LAP TGF-beta-1,OPG,TRAIL,TWEAK	8
	Differentiation	3,79E-07	CSF-1,HGF,IL6,LAP TGF-beta-1,TRAIL	5
	Endocytosis	2,54E-07	MCP-3,CSF-1,HGF,IL6,LAP TGF-beta-1,TRAIL	6
	Formation	8,53E-08	MCP-3,HGF,IL6,LAP TGF-beta-1,TRAIL	5
	Induction	1,18E-10	CSF-1,HGF,IL-18R1,IL6,LAP TGF-beta-1,TRAIL	6
	Invasion	1,32E-05	CDCP1,CSF-1,CXCL11,HGF,IL6,LAP TGF-beta-1,TRAIL	7
	Migration	1,68E-09	TR-AP,CCL23,MCP-3,CDCP1,CSF-1,CXCL11,HGF,IL6,LAP TGF-beta-1,OPG,TRAIL,TWEAK	12
	Recruitment	6,54E-11	CCL23,MCP-3,CSF-1,CXCL11,HGF,IL6,LAP TGF-beta-1,TWEAK	8
	Stimulation	1,74E-13	MCP-3,CSF-1,CXCL11,HGF,IL-18R1,IL6,LAP TGF-beta-1,TRAIL	8

Supplementary Table S2 (continued)

	Enriched Function	p-value for enrichment	Regulated proteins that enriched the function	# Molecules
IL-6 +sIL-6R	Angiogenesis/Vasculogenesis	4,12E-09	MCP-1,MCP-3,CSF-1,CXCL5,JAM-A,GRN,HGF,IGFBP-1,IGFBP7,TNF-R1,TRAIL	11
	Attraction	3,71E-10	MCP-1,MCP-3,CSF-1,CXCL11,CXCL16,CXCL5	6
	Cell death	6,40E-06	CSF-1,CXCL11,GDF15,HGF,OPG,TRAIL	6
	Cell movement	9,52E-17	MCP-1,CCL23,MCP-3,CSF-1,CXCL11,CXCL16,CXCL5,JAM-A,GDF15,GRN,HGF,IL-15RA,OPG,TNF-R1,TRAIL	15
	Cell proliferation	1,62E-09	MCP-1,CSF-1,GRN,HGF,IGFBP7,OPG,TNF-R1,TRAIL	8
	Chemotaxis	1,22E-10	MCP-1,CCL23,MCP-3,CSF-1,CXCL11,CXCL16,CXCL5,GRN,HGF,TNF-R1	10
	Development of vasculature	6,62E-10	MCP-1,MCP-3,CSF-1,CXCL5,JAM-A,GRN,HGF,IGFBP-1,IGFBP7,OPG,TNF-R1,TRAIL	12
	Differentiation	2,40E-06	MCP-1,CSF-1,HGF,TNF-R1,TRAIL	5
	Endocytosis	4,61E-05	MCP-3,CSF-1,GRN,HGF,TNF-R1,TRAIL	6
	Invasion	1,62E-06	MCP-1,CSF-1,CXCL11,CXCL5,JAM-A,GDF15,GRN,HGF,TRAIL	9
	Migration	1,83E-15	TR-AP,MCP-1,CCL23,MCP-3,CSF-1,CXCL11,CXCL16,CXCL5,JAM-A,GDF15,GRN,HGF,IGFBP-1,IGFBP7,IL-15RA,OPG,TNF-R1,TRAIL	18
	Mobilization of Ca2+	7,24E-07	MCP-1,CCL23,MCP-3,CXCL11,CXCL16,CXCL5	6
	Organization	2,23E-05	MCP-1,MCP-3,CSF-1,JAM-A,GDF15,GRN,HGF,TNF-R1,TRAIL	9
	Proliferation	3,64E-08	MCP-1,CSF-1,JAM-A,GRN,HGF,IGFBP-1,TRAIL	7
	Recruitment	1,74E-07	MCP-1,CCL23,MCP-3,CSF-1,CXCL5,TNF-R1	6
	Stimulation	3,97E-10	MCP-1,MCP-3,CSF-1,CXCL11,CXCL5,HGF,TRAIL	7
	Synthesis of lipid	2,71E-05	MCP-1,CSF-1,GDF15,HGF,IGFBP7,TNF-R1,TRAIL	7
IL-11 +sIL-11R	Angiogenesis/Vasculogenesis	8,56E-07	MCP-1,MCP-3,HGF,IGFBP7,IL6,TRAIL	6
	Cell movement	5,54E-09	MCP-1,CCL23,MCP-3,HGF,IL6	5
	Stimulation	7,00E-09	MCP-1,MCP-3,HGF,IL6,TRAIL	5
	Cell proliferation	2,44E-07	MCP-1,HGF,IGFBP7,IL6,TRAIL	5
	Migration	2,84E-07	TR-AP,MCP-1,CCL23,MCP-3,HGF,IGFBP7,IL6,TRAIL	8
	Chemotaxis	3,12E-06	MCP-1,CCL23,MCP-3,HGF,IL6	5
	Synthesis of lipid	2,38E-05	MCP-1,HGF,IGFBP7,IL6,TRAIL	5
	Homeostasis	5,15E-05	MCP-1,CCL23,MCP-3,HGF,IL6,TRAIL	6
IL-6	Chemotaxis	6,10E-08	CCL23,MCP-3,CXCL11,CXCL5,HGF	5
	Cell movement	2,26E-06	CCL23,MCP-3,CXCL11,CXCL5,HGF	5
IL-11	Adhesion	6,34E-10	MCP-3,CSF-1,CXCL11,HGF,LAP TGF-beta-1,OPG,TRANCE	7
	Cell movement	3,14E-06	CCL23,MCP-3,CSF-1,CXCL11,HGF,LAP TGF-beta-1,OPG	7
	Cell proliferation	1,91E-06	CSF-1,HGF,LAP TGF-beta-1,OPG,TRANCE	5
	Chemotaxis	2,29E-08	CCL23,MCP-3,CSF-1,CXCL11,HGF,LAP TGF-beta-1,TRANCE	7
	Formation	2,39E-06	MCP-3,HGF,LAP TGF-beta-1,TRANCE	4
	Invasion	2,90E-06	PD-L1,CSF-1,CXCL11,HGF,MMP-10,LAP TGF-beta-1,TRANCE	7
	Metastasis	2,34E-06	PD-L1,CSF-1,HGF,MMP-10,LAP TGF-beta-1,OPG,TRANCE	7
	Migration	2,14E-05	MCP-3,CSF-1,CXCL11,HGF,LAP TGF-beta-1,OPG	6