

# **Insulin-like Growth Factor-1 and mTORC1 Signaling Promote the Intestinal Regenerative Response after Irradiation Injury**

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## **SUPPLEMENTARY MATERIAL**

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**Appendix Table 3.** RNA array comparison between the normalized cycle threshold (Ct) values of 84 growth factor genes from UNIIR and 6 DPI samples

Appendix Table 1: RNA array comparison between the normalized cycle threshold (Ct) values of 84 growth factor genes from UNIIR and 48 HPI samples

GeneBank	Symbol	Description	logFC	AveExpr	t	P.Value	adj.P.Val	Mock Irradiated			48 Hours		
								PAMM041 Plate1	PAMM041 Plate2	PAMM041 Plate3	PAMM041 Plate1	PAMM041 Plate2	PAMM041 Plate3
NM_011313	S100a6	S100 calcium binding protein A6 (calcyclin)	-2.856300133	1.070665867	-12.06377148	2.15E-07	1.68E-05	3.0630376	2.9841846	3.0664342	-0.1488696	0.1112968	0.5823288
NM_007950	Ereg	Epiregulin	-3.654474133	4.985225867	-9.52486492	2.02E-06	7.89E-05	7.8766046	6.4867596	6.9011292	3.3549354	3.2953638	3.6507718
NM_007559	Bmp8b	Bone morphogenetic protein 8b	-2.797479133	9.759587367	-8.582421077	5.29E-06	0.000137505	10.6243746	10.3265996	11.5622702	8.1376504	7.7460718	8.2370848
NM_010512	Igf1	Insulin-like growth factor 1	-1.9160684	5.169512527	-7.359306956	3.65E-05	0.000712242	NA	6.2589006	6.6587702	4.3446264	4.4112368	4.8724378
NM_198190	Ntf5	Neurotrophin 5	-2.492264467	12.3053502	-6.35908881	7.32E-05	0.001141469	14.4148456	13.7942406	12.8395372	10.9308274	11.1166828	11.5243198
NM_007557	Bmp7	Bone morphogenetic protein 7	-1.182783133	7.304668867	-6.040466053	0.000111969	0.001455595	7.9223216	7.3297156	7.7227622	6.4271424	6.5605168	6.4387908
NM_008176	Cxcl1	Chemokine (C-X-C motif) ligand 1	-3.248444133	10.74938437	-5.057454797	0.000454332	0.005062556	13.3940856	12.1514456	12.0477552	8.5399404	8.9788668	10.3291468
NM_008006	Fgf2	Fibroblast growth factor 2	-1.705751133	8.78776095	-4.870034498	0.000602709	0.005876409	10.1883416	9.2035826	9.1711342	7.4714824	7.5737088	8.4006138
NM_010427	Hgf	Hepatocyte growth factor	-1.410369067	7.523043345	-4.857469255	0.000824909	0.00714921	NA	7.6953736	8.4841492	6.5159764	6.7879898	6.7342108
NM_008380	Inhba	Inhibin beta-A	-2.147391133	9.12383295	-4.402650467	0.001246289	0.008837323	10.5211856	8.7307816	11.0667442	7.7877774	7.8551908	8.2335698
NM_008381	Inhbb	Inhibin beta-B	-1.731224133	9.220747617	-4.439740637	0.001175156	0.008837323	10.5652196	9.9916646	9.9804662	8.0176224	8.2352518	9.0908038
NM_011562	Tgdf1	Teratocarcinoma-derived growth factor 1	-5.638162433	16.71278144	-4.931942123	0.001513271	0.009119166	20.3083686	19.8610076	NA	14.5236994	14.8877538	13.9281238
NM_009368	Tgfb3	Transforming growth factor, beta 3	-0.8728348	8.327371783	-4.278272874	0.001519861	0.009119166	9.0148256	8.5242746	8.6612152	7.7236964	7.6856888	8.1724258
NM_009711	Artn	Artemin	-1.0797568	9.52028395	-4.208182905	0.001701259	0.009478441	10.2639236	9.6049026	9.9281242	8.8764214	8.8420558	8.8392028
NM_008005	Fgf18	Fibroblast growth factor 18	-1.841283467	12.19765912	-4.094907674	0.0020441	0.010629319	13.3401656	12.8539406	12.0933502	10.5537974	11.3214388	10.8883698
NM_010200	Fgf13	Fibroblast growth factor 13	-1.023777467	8.592814033	-3.897998002	0.002823535	0.012955041	8.8751626	8.5336686	8.8122092	7.5250804	7.6431268	7.9815008
NM_011697	Vegfb	Vascular endothelial growth factor B	0.776485533	7.4733892	3.904508557	0.002793324	0.012955041	7.3712026	7.5055296	6.9793652	8.1422794	8.0513108	7.9919638
NM_007540	Bdnf	Brain derived neurotrophic factor	-2.250070467	11.88260395	-3.811830928	0.003257092	0.013371218	12.6153106	13.5828136	13.1313542	9.6960704	10.7225598	12.1606368
NM_008361	Il1b	Interleukin 1 beta	-1.928392133	8.0152477	-3.837996236	0.003118544	0.013371218	9.1403526	7.2444306	7.9650722	6.1277164	5.7024638	6.7344988
NM_008003	Fgf15	Fibroblast growth factor 15	-3.399312133	15.90422212	-3.635582164	0.004373888	0.017058162	18.8327256	15.2081336	18.7683662	14.3071594	14.2959838	14.0081458
NM_008350	Il11	Interleukin 11	-1.9242938	11.42749745	-3.541601097	0.005125421	0.019037278	13.4814356	12.0462936	11.6978712	10.8453724	9.6356288	10.9717178
NM_023304	Fgf22	Fibroblast growth factor 22	-1.203174467	11.97653078	-3.366450296	0.006903153	0.024388971	12.7242316	12.8126376	11.6822042	10.7065134	11.7846838	11.1183528
NM_008007	Fgf3	Fibroblast growth factor 3	-1.5357288	13.8697248	-3.695777515	0.00719162	0.024388971	14.0930906	15.3398366	14.4587422	12.7679754	13.1079838	13.4085238
NM_007778	Csf1	Colony stimulating factor 1 (macrophage)	-0.896353467	7.640046867	-3.095373286	0.010997186	0.035740853	8.3771456	7.2941266	7.5068442	6.5301614	6.7558028	7.2030918
NM_173404	Bmp3	Bone morphogenetic protein 3	0.9908942	6.965816283	3.0267739	0.012381408	0.035768511	6.9570366	6.1405106	7.2540622	7.6435534	7.6990748	7.9816638
NM_177099	Lefty2	Left-right determination factor 2	-3.4432986	17.96781106	-3.759399992	0.01193627	0.035768511	NA	18.6455386	17.5709482	NA	14.6649448	NA
NM_009367	Tgfb2	Transforming growth factor, beta 2	-0.847642133	8.8581462	-3.06690057	0.011551543	0.035768511	9.2531686	8.7206876	8.9670022	7.9029814	8.3318368	8.1631138
NM_008501	Lif	Leukemia inhibitory factor	-0.6475608	8.660766617	-2.856112886	0.016642419	0.046361025	9.0229606	8.3931566	8.8827652	8.2510534	7.8959628	8.2091838
NM_008827	Pgf	Placental growth factor	-1.024631467	9.671740617	-2.798181457	0.018403127	0.049498065	10.5762326	9.6847136	9.9495492	9.0016854	8.9742118	9.1607038
NM_013609	Ngf	Nerve growth factor	-1.077093567	12.25852698	-2.604529305	0.027860182	0.072436474	NA	12.8177566	13.0810692	11.4823524	11.5930088	12.5415968
NM_007554	Bmp4	Bone morphogenetic protein 4	-0.502244133	5.530883367	-2.43464192	0.034571663	0.086986765	5.6185626	5.2013416	5.4223182	4.8169994	4.8395038	5.0789868
NM_008008	Fgf7	Fibroblast growth factor 7	-0.755276467	8.584481283	-2.406915063	0.036267728	0.088402587	9.0568086	7.9820726	8.3035972	7.9832504	7.6949148	7.3984838
NM_010216	Figf	C-fos induced growth factor	-0.702217467	8.76661645	-2.30926491	0.042912965	0.101430645	9.4802056	8.4658226	9.1185672	8.2767854	8.2786518	8.4025058
NM_007556	Bmp6	Bone morphogenetic protein 6	-0.666260133	8.844636783	-2.197131107	0.052004475	0.119304384	9.3180386	8.3203026	8.9154822	8.2285124	8.0995148	8.2270158
NM_008002	Fgf10	Fibroblast growth factor 10	-1.044521467	9.978682783	-2.160053796	0.055399206	0.123461088	11.2574046	9.5859006	9.8687822	8.8999644	9.0210428	9.6575158
NM_009755	Bmp1	Bone morphogenetic protein 1	-0.5712648	6.8769237	-2.134469369	0.057864287	0.125372623	7.0603256	6.3236306	7.0829282	6.4128564	6.4677518	5.8724818

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NM_053009	Zfp91	Zinc finger protein 91	0.3820752	2.9857062	2.069606434	0.06459112	0.136165064	3.1982956	2.6738356	2.9852802	3.4252724	3.3919728	3.1863918
NM_010113	Egf	Epidermal growth factor	-0.727421467	10.77793162	-2.00703274	0.071778059	0.137082977	11.1442206	10.8136886	11.2250072	10.2468084	9.7512268	11.0026168
NM_010514	Igf2	Insulin-like growth factor 2	-0.421933233	10.18495798	-2.051964277	0.069474205	0.137082977	NA	9.7744106	9.8800972	9.3983774	9.5484328	9.2691518
NM_010554	Il1a	Interleukin 1 alpha	-1.093837467	8.893557367	-2.004729826	0.072056436	0.137082977	9.3563216	9.1697366	9.0616982	9.3344714	6.9118398	8.0599328
NM_031168	Il6	Interleukin 6	-1.4175554	11.67697153	-2.050139571	0.069681673	0.137082977	NA	12.2604506	12.0721942	11.4719134	10.1521388	10.6222488
NM_009263	Spp1	Secreted phosphoprotein 1	-1.8386458	7.8554667	-1.986354432	0.07431431	0.13801229	9.9680006	8.4657956	9.1258262	6.4274564	6.6271578	8.9890708
NM_011577	Tgfb1	Transforming growth factor, beta 1	-0.4749818	5.655222283	-1.945493249	0.07957516	0.144345639	6.1353986	5.2322026	5.3020142	4.9267414	5.0680148	5.2499138
NM_008360	Il18	Interleukin 18	0.474545533	1.433462283	1.726612455	0.114132454	0.202325714	1.3350986	0.5841806	1.0940462	1.5458234	1.8349368	1.0562018
NM_009971	Csf3	Colony stimulating factor 3 (granulocyte)	-2.4318558	13.82481198	-1.710332265	0.120376205	0.208652089	16.3707856	14.7968256	13.5958202	12.0105824	12.1954358	13.2618458
NM_010094	Lefty1	Left right determination factor 1	0.386938867	8.5232862	1.553510902	0.150542284	0.255267351	8.5418916	8.1262766	7.8896622	8.7489894	8.5898948	8.3797628
NM_007553	Bmp2	Bone morphogenetic protein 2	-0.458637133	6.18948745	-1.501063428	0.163433135	0.271229458	5.5538156	5.5971856	6.5640362	5.3441494	5.3456048	5.6493718
NM_008808	Pdgfa	Platelet derived growth factor, alpha	-0.417913133	6.65306195	-1.43181896	0.181909254	0.295602538	7.1911226	6.3190366	6.3524622	6.1714654	6.2973168	6.1400998
NM_009362	Tff1	Trefoil factor 1	-1.7639448	10.93600145	-1.377980704	0.19748101	0.30202978	11.3064826	12.3240246	15.4074662	11.0844234	11.5227018	11.1390138
NM_031199	Tgfa	Transforming growth factor alpha	-0.231869133	7.220880617	-1.383401853	0.195863676	0.30202978	7.4941846	7.3697266	7.4511782	7.0632814	7.3624548	7.1937458
NM_009505	Vegfa	Vascular endothelial growth factor A	-0.313914467	3.838946117	-1.392913708	0.193052919	0.30202978	3.9847886	3.3746376	3.7957642	3.2017734	3.3136438	3.6980298
NM_010272	Gdf11	Growth differentiation factor 11	0.386884933	9.077986527	1.270368584	0.234899428	0.352349142	NA	8.6629276	8.5397232	8.7409024	9.0295648	9.1941638
NM_007555	Bmp5	Bone morphogenetic protein 5	-0.281315467	5.8139917	-1.184451902	0.26291307	0.372858536	5.8051126	5.0782476	5.6098372	5.3557534	5.2910168	5.0024808
NM_010197	Fgf1	Fibroblast growth factor 1	-0.387265133	8.064896117	-1.190776959	0.260527869	0.372858536	8.6988466	7.4211386	8.2531592	7.3763644	7.8953218	7.9396628
NM_010275	Gdnf	Glial cell line derived neurotrophic factor	-0.560932133	9.8568922	-1.1980575	0.257803716	0.372858536	10.9995856	9.0196806	9.3310132	9.1154124	9.5006268	9.0514438
NM_021704	Cxcl12	Chemokine (C-X-C motif) ligand 12	-0.2458019	5.654867982	-1.142644924	0.281828702	0.39254712	NA	5.4173466	5.9094592	5.4118524	5.4238348	5.4171158
NM_008109	Gdf5	Growth differentiation factor 5	-0.7064928	14.50696255	-1.318606439	0.304427919	0.416585574	NA	14.3433456	NA	NA	13.6368528	NA
NM_010202	Fgf4	Fibroblast growth factor 4	-0.992262133	13.15846671	-1.066601688	0.313132251	0.42110889	15.7587056	12.0835286	11.9845432	12.2450684	12.5256838	12.0792388
NM_010784	Mdk	Midkine	-0.2771218	7.14173445	-1.039685235	0.322336803	0.42614018	7.2993646	6.7121356	7.3918062	7.1208794	6.7918078	6.6592538
NM_010205	Fgf8	Fibroblast growth factor 8	-0.677095133	15.13678162	-1.011653614	0.334937242	0.435418414	14.4513626	14.0275456	16.5623042	14.1172294	14.1458168	14.7468808
NM_013611	Nodal	Nodal	-0.4304644	13.95672689	-0.770377969	0.465358723	0.595048859	NA	15.0232966	13.4918702	14.4212614	13.5650798	13.4950158
NM_009969	Csf2	Colony stimulating factor 2	-0.327836133	11.28337253	-0.720869648	0.487069673	0.603692874	11.0947516	9.8922346	11.6219092	10.7593044	10.4718948	10.3941878
NM_010203	Fgf5	Fibroblast growth factor 5	-0.9662417	15.40041338	-0.731099527	0.487598091	0.603692874	15.4313276	18.8508646	13.6415922	14.4210674	15.5956388	NA
NM_007558	Bmp8a	Bone morphogenetic protein 8a	-0.161451467	7.019420283	-0.648677419	0.530779268	0.64398441	6.4508076	6.0825956	6.8750462	6.2589254	6.4072528	6.2579168
NM_008742	Ntf3	Neurotrophin 3	-0.202740467	8.184056367	-0.639248794	0.536653675	0.64398441	8.0675716	7.1573656	7.9336382	7.5633794	7.4024378	7.5845368
NM_008371	Il7	Interleukin 7	0.140327433	8.0910868	0.576041435	0.578297736	0.683442778	NA	8.3388656	7.9094442	8.2243494	8.3641568	8.2049408
NM_019400	Rabep1	Rabaptin, RAB GTPase binding effector protein 1	0.093039533	5.6005022	0.483077241	0.639170686	0.744109156	5.4960156	5.1741256	5.7678192	5.4335124	5.7314028	5.5521638
NM_007445	Amh	Anti-Mullerian hormone	-0.4063938	17.11161137	-0.441737054	0.66783286	0.750731565	15.5812986	18.2167106	19.0645092	18.5523234	17.1921968	15.8988168
NM_008004	Fgf17	Fibroblast growth factor 17	-0.3828441	16.06200877	-0.465288617	0.664455207	0.750731565	NA	NA	16.0067922	14.8832524	16.3646438	NA
NM_008351	Il12a	Interleukin 12A	0.462065533	13.99847037	0.433328814	0.673733456	0.750731565	14.1011056	11.8219306	12.2802152	13.1741414	12.3459328	14.0693738
NM_010198	Fgf11	Fibroblast growth factor 11	0.101544867	8.684428533	0.309755191	0.762939187	0.838158543	8.3578896	7.9281556	8.0225572	7.8349984	8.2972308	8.4810078
NM_009506	Vegfc	Vascular endothelial growth factor C	-0.051279467	9.746123117	-0.235766265	0.818247834	0.886435154	9.7035556	9.3963526	9.5647672	9.3971664	9.5304628	9.5832078
NM_021283	Il4	Interleukin 4	-0.170447733	12.0533028	-0.21760744	0.83244792	0.8894649	NA	11.4042666	11.4354522	11.4158414	12.1231398	10.2092538
NM_010564	Inha	Inhibin alpha	-0.0570694	11.07142589	-0.139170392	0.89229121	0.934919022	NA	10.7289126	10.4156122	9.8185994	10.5156168	11.2113628

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NM_013598	Kitl	Kit ligand	0.0586592	3.753494867	0.130150508	0.898960598	0.934919022	3.7911376	3.2883876	3.6808272	3.4788894	3.6081468	3.8492938
NM_013518	Fgf9	Fibroblast growth factor 9	0.026822867	11.1144902	0.098284028	0.923598046	0.935592826	10.4335766	10.5219786	10.4836972	10.7245544	10.7038828	10.0912838
NM_145741	Gdf10	Growth differentiation factor 10	0.0848592	12.08812053	0.105427995	0.918066384	0.935592826	13.0936396	10.6253356	10.8201742	11.4158844	12.1902938	11.1875488
NM_010201	Fgf14	Fibroblast growth factor 14	-0.018560467	9.910584867	-0.06622786	0.948467583	0.948467583	10.6179506	10.1717016	10.4141682	10.0998634	11.0542688	9.9940068
NM_009756	Bmp10	Bone morphogenetic protein 10	NA	14.3355976	NA	NA	NA	NA	NA	NA	NA	NA	14.2154598
NM_010204	Fgf6	Fibroblast growth factor 6	NA	17.3500847	NA	NA	NA	NA	NA	NA	NA	NA	19.9700298
NM_008366	Il2	Interleukin 2	NA	14.61257653	NA	NA	NA	NA	NA	14.4339402	NA	13.5979628	13.7241438
NM_010556	Il3	Interleukin 3	NA	14.34337152	NA	NA	NA	NA	NA	14.5231272	15.1948744	14.7029568	14.5363838
NM_008493	Lep	Leptin	NA	19.7642197	NA	NA	NA	NA	NA	NA	NA	19.0965168	NA
NM_010834	Mstn	Myostatin	NA	15.6276996	NA	NA	NA	NA	16.3117006	NA	NA	NA	NA

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GeneBank	Symbol	Description	logFC	AveExpr	t	P.Value	adj.P.Val	Mock Irradiated			4 Days		
								PAMM041 Plate1	PAMM041 Plate2	PAMM041 Plate3	PAMM041 Plate1	PAMM041 Plate2	PAMM041 Plate3
NM_011313	S100a6	S100 calcium binding protein A6 (calcyclin)	-3.56087	1.070665867	-15.03956865	2.50E-08	1.95E-06	3.0630376	2.9841846	3.0664342	-0.7994798	-0.3002294	-0.4692444
NM_007950	Ereg	Epiregulin	-3.699359667	4.985225867	-9.641852653	1.81E-06	7.05E-05	7.8766046	6.4867596	6.9011292	3.0734792	3.8420966	3.2508386
NM_013518	Fgf9	Fibroblast growth factor 9	2.014945333	11.1144902	7.383138667	2.03E-05	0.000396755	10.4335766	10.5219786	10.4836972	12.8134372	12.2057716	12.4648796
NM_010512	Igf1	Insulin-like growth factor 1	-2.0662326	5.169512527	-7.936063215	1.98E-05	0.000396755	NA	6.2589006	6.6587702	4.1628152	4.3657296	4.6492636
NM_007559	Bmp8b	Bone morphogenetic protein 8b	-2.308634667	9.759587367	-7.082689049	2.92E-05	0.000455986	10.6243746	10.3265996	11.5622702	8.3924532	8.6936286	8.5012586
NM_198190	Ntf5	Neurotrophin 5	-2.547395333	12.3053502	-6.499756898	6.09E-05	0.000791702	14.4148456	13.7942406	12.8395372	10.8761622	11.5732326	10.9570426
NM_007558	Bmp8a	Bone morphogenetic protein 8a	1.411386	7.019420283	5.670646706	0.000186652	0.002079834	6.4508076	6.0825956	6.8750462	8.0272492	7.5417696	8.0735886
NM_010198	Fgf11	Fibroblast growth factor 11	1.435928333	8.684428533	4.380194393	0.001291551	0.011115048	8.3578896	7.9281556	8.0225572	10.0598112	9.2476296	9.3089466
NM_010201	Fgf14	Fibroblast growth factor 14	-1.242139667	9.910584867	-4.432229742	0.001189207	0.011115048	10.6179506	10.1717016	10.4141682	8.9723922	9.3021976	9.2028116
NM_008360	Il18	Interleukin 18	1.18691	1.433462283	4.318518341	0.001425006	0.011115048	1.3350986	0.5841806	1.0940462	2.4938802	1.9257836	2.1543916
NM_010427	Hgf	Hepatocyte growth factor	-1.279099267	7.523043345	-4.40536134	0.001587992	0.011260308	NA	7.6953736	8.4841492	6.6155292	7.1318486	6.6846086
NM_008742	Ntf3	Neurotrophin 3	1.288358333	8.184056367	4.062245317	0.002155889	0.014013281	8.0675716	7.1573656	7.9336382	9.5781922	8.5748416	8.8706166
NM_009505	Vegfa	Vascular endothelial growth factor A	0.886671333	3.838946117	3.934373168	0.002659011	0.015954064	3.9847886	3.3746376	3.7957642	4.8134282	4.4538636	4.5479126
NM_007540	Bdnf	Brain derived neurotrophic factor	-2.227817667	11.88260395	-3.774132593	0.003468084	0.01690691	12.6153106	13.5828136	13.1313542	9.9437452	11.6444996	11.0577806
NM_008176	Cxcl1	Chemokine (C-X-C motif) ligand 1	-2.438001	10.74938437	-3.795687826	0.003345757	0.01690691	13.3940856	12.1514456	12.0477552	10.2097712	10.7834386	9.2860736
NM_009362	Tff1	Trefoil factor 1	-4.876003333	10.93600145	-3.809097941	0.003271928	0.01690691	11.3064826	12.3240246	15.4074662	7.2505392	9.0230736	8.1363506
NM_008350	Il11	Interleukin 11	-2.001733333	11.42749745	-3.684126077	0.004031387	0.018496954	13.4814356	12.0462936	11.6978712	9.6982872	11.1744726	10.3476406
NM_010514	Igf2	Insulin-like growth factor 2	0.770476567	10.18495798	3.747015561	0.004339918	0.018806309	NA	9.7744106	9.8800972	10.3565112	10.7932386	10.6434416
NM_008006	Fgf2	Fibroblast growth factor 2	-1.240967	8.78776095	-3.543044459	0.005112921	0.020989885	10.1883416	9.2035826	9.1711342	8.0597152	8.4067146	8.3737276
NM_007557	Bmp7	Bone morphogenetic protein 7	-0.657557667	7.304668867	-3.358142884	0.007001808	0.024824593	7.9223216	7.3297156	7.7227622	6.7999652	7.0713926	7.1307686
NM_009969	Csf2	Colony stimulating factor 2 (granulocyte-macrophage)	1.552417333	11.28337253	3.41356679	0.006370047	0.024824593	11.0947516	9.8922346	11.6219092	11.8580392	12.2637966	13.1443116
NM_008381	Inhbb	Inhibin beta-B	-1.312911	9.220747617	-3.366972657	0.006896997	0.024824593	10.5652196	9.9916646	9.9804662	8.8402092	9.5694896	8.1889186
NM_008003	Fgf15	Fibroblast growth factor 15	-3.113243333	15.90422212	-3.329630081	0.007351579	0.024931441	18.8327256	15.2081336	18.7683662	13.5276322	14.6396726	15.3021906
NM_007555	Bmp5	Bone morphogenetic protein 5	0.777132333	5.8139917	3.27204146	0.008113797	0.02636984	5.8051126	5.0782476	5.6098372	6.2793652	6.2776876	6.2675416
NM_009263	Spp1	Secreted phosphoprotein 1	-2.54038	7.8554667	-2.744462838	0.020202488	0.063031763	9.9680006	8.4657956	9.1258262	5.6302102	6.9731796	7.3350926
NM_011562	TdGF1	Teratocarcinoma-derived growth factor 1	-3.6323252	16.71278144	-2.900510811	0.022023535	0.066070604	20.3083686	19.8610076	NA	18.4612072	14.4435186	NA
NM_008351	Il12a	Interleukin 12A	2.731588333	13.99847037	2.561705749	0.027744613	0.080151105	14.1011056	11.8219306	12.2802152	13.9237282	18.3590996	14.1151886
NM_008380	Inhba	Inhibin beta-A	-1.193691	9.12383295	-2.447343736	0.033820885	0.094215322	10.5211856	8.7307816	11.0667442	9.0241422	9.0577156	8.6557806
NM_008008	Fgf7	Fibroblast growth factor 7	0.717022667	8.584481283	2.285007853	0.044739046	0.120332606	9.0568086	7.9820726	8.3035972	9.0743702	9.2070506	9.2121256
NM_007554	Bmp4	Bone morphogenetic protein 4	0.461922333	5.530883367	2.239180912	0.04839627	0.121771259	5.6185626	5.2013416	5.4223182	6.2359032	5.6678986	5.7241876
NM_009368	Tgfb3	Transforming growth factor, beta 3	-0.458053	8.327371783	-2.245185143	0.04790116	0.121771259	9.0148256	8.5242746	8.6612152	8.1634182	8.2405996	8.4221386
NM_013609	Ngf	Nerve growth factor	-0.855243433	12.25852698	-2.068071571	0.067668282	0.155244389	NA	12.8177566	13.0810692	12.3888372	11.8325566	12.0611146
NM_008808	Pdgfa	Platelet derived growth factor, alpha	0.602742	6.65306195	2.065064136	0.065089021	0.155244389	7.1911226	6.3190366	6.3524622	7.1366162	7.0616176	7.4726136
NM_031199	Tgfa	Transforming growth factor alpha	-0.34226	7.220880617	-2.042027377	0.067670631	0.155244389	7.4941846	7.3697266	7.4511782	7.1752852	7.0812556	7.0317686
NM_145741	Gdf10	Growth differentiation factor 10	1.594346	12.08812053	1.980795275	0.075010377	0.161507455	13.0936396	10.6253356	10.8201742	11.4664242	13.2716326	14.5841306
NM_010564	Inha	Inhibin alpha	0.826628733	11.07142589	2.01583063	0.073694543	0.161507455	NA	10.7289126	10.4156122	11.4994912	11.2107796	11.4864026
NM_009506	Vegfc	Vascular endothelial growth factor C	0.428082	9.746123117	1.968181432	0.076612511	0.161507455	9.7035556	9.3963526	9.5647672	10.3353682	9.6481926	9.9653606

Appendix Table 2: RNA array comparison between the normalized cycle threshold (Ct) values of 84 growth factor genes from UNIIR and 4 DPI samples

NM_010216	Fgf	C-fos induced growth factor	-0.582496	8.76661645	-1.915556985	0.083648132	0.171698798	9.4802056	8.4658226	9.1185672	8.1823392	8.2000076	8.9347606
NM_009755	Bmp1	Bone morphogenetic protein 1	0.502127	6.8769237	1.876143429	0.089306511	0.178613021	7.0603256	6.3236306	7.0829282	7.2259722	7.2023166	7.5449766
NM_031168	Il6	Interleukin 6	-1.1950876	11.67697153	-1.728395504	0.116989607	0.228129734	NA	12.2604506	12.0721942	10.8082452	11.5256046	10.5798546
NM_009711	Artn	Artemin	-0.373506667	9.52028395	-1.455683696	0.175348747	0.3335903	10.2639236	9.6049026	9.9281242	9.4075852	9.4063476	9.8624976
NM_007445	Amh	Anti-Mullerian hormone	-1.307486	17.11161137	-1.421195435	0.184896454	0.342856345	15.5812986	18.2167106	19.0645092	15.3906752	17.3773566	16.1720286
NM_008827	Pgf	Placental growth factor	-0.515139	9.671740617	-1.40680083	0.189010549	0.342856345	10.5762326	9.6847136	9.9495492	9.4115592	9.6886466	9.5648726
NM_053009	Zfp91	Zinc finger protein 91	-0.252052667	2.9857062	-1.365306674	0.201306047	0.35686072	3.1982956	2.6738356	2.9852802	2.6924792	2.7182496	2.6905246
NM_007553	Bmp2	Bone morphogenetic protein 2	0.367467667	6.18948745	1.202676877	0.256087107	0.429449304	5.5538156	5.5971856	6.5640362	6.2096512	6.4398186	6.1679706
NM_008002	Fgf10	Fibroblast growth factor 10	-0.571018333	9.978682783	-1.18085684	0.264276495	0.429449304	11.2574046	9.5859006	9.8687822	8.8978812	10.2467376	9.8544136
NM_008005	Fgf18	Fibroblast growth factor 18	-0.531974333	12.19765912	-1.183080074	0.263432674	0.429449304	13.3401656	12.8539406	12.0933502	12.3315842	12.0880246	12.2719246
NM_021283	Il4	Interleukin 4	0.960439067	12.0533028	1.22617463	0.250357571	0.429449304	NA	11.4042666	11.4354522	12.2435122	11.5561686	13.3412146
NM_010272	Gdf11	Growth differentiation factor 11	0.3507344	9.077986527	1.151665327	0.278285075	0.442984405	NA	8.6629276	8.5397232	8.8979592	8.8209826	9.1372376
NM_007778	Csf1	Colony stimulating factor 1 (macrophage)	0.324316333	7.640046867	1.119960096	0.288230693	0.449639882	8.3771456	7.2941266	7.5068442	8.2594312	7.9860486	7.9055856
NM_011697	Vegfb	Vascular endothelial growth factor B	-0.200353	7.4733892	-1.007462431	0.336852242	0.515185782	7.3712026	7.5055296	6.9793652	7.1758832	6.9581246	7.1210306
NM_010554	Il1a	Interleukin 1 alpha	-0.538575333	8.893557367	-0.987073552	0.346283707	0.519425561	9.3563216	9.1697366	9.0616982	8.1080942	8.9302776	8.9336586
NM_008007	Fgf3	Fibroblast growth factor 3	-0.443138867	13.8697248	-0.953841308	0.370782401	0.545679761	14.0930906	15.3398366	14.4587422	NA	13.6723226	14.7025126
NM_173404	Bmp3	Bone morphogenetic protein 3	-0.287558333	6.965816283	-0.878372341	0.399819076	0.565452207	6.9570366	6.1405106	7.2540622	6.0328112	7.0516706	6.4044526
NM_009971	Csf3	Colony stimulating factor 3 (granulocyte)	-1.264746	13.82481198	-0.889500064	0.39622286	0.565452207	16.3707856	14.7968256	13.5958202	12.5078762	15.5937986	12.8675186
NM_010205	Fgf8	Fibroblast growth factor 8	0.579986667	15.13678162	0.866563026	0.405965687	0.565452207	14.4513626	14.0275456	16.5623042	14.5930202	16.2253366	15.9628156
NM_008004	Fgf17	Fibroblast growth factor 17	0.770063	16.06200877	0.810508097	0.460378977	0.629992284	NA	NA	16.0067922	16.7768552	NA	NA
NM_013611	Nodal	Nodal	-0.4552403	13.95672689	-0.743732384	0.480369938	0.644677566	NA	15.0232966	13.4918702	NA	13.2325276	14.3721586
NM_019400	Rabep1	Rabaptin, RAB GTPase binding effector protein 1	0.138651333	5.6005022	0.719901542	0.487640723	0.644677566	5.4960156	5.1741256	5.7678192	5.5732922	5.6243156	5.6563066
NM_010113	Egf	Epidermal growth factor	-0.238605667	10.77793162	-0.658338263	0.52479934	0.682239142	11.1442206	10.8136886	11.2250072	11.1537882	10.1876056	11.1257056
NM_177099	Lefty2	Left-right determination factor 2	-0.4914335	17.96781106	-0.657134453	0.538692991	0.688820546	NA	18.6455386	17.5709482	18.5973272	16.6362926	NA
NM_010094	Lefty1	Left right determination factor 1	0.153886	8.5232862	0.617832943	0.550135428	0.692105861	8.5418916	8.1262766	7.8896622	8.4090092	8.2237096	8.3867696
NM_007556	Bmp6	Bone morphogenetic protein 6	0.179723	8.844636783	0.592673904	0.566216118	0.701029479	9.3180386	8.3203026	8.9154822	9.0245412	9.1163086	8.9521426
NM_008371	Il7	Interleukin 7	-0.125601767	8.0910868	-0.515592854	0.618205348	0.753437768	NA	8.3388656	7.9094442	8.0528512	7.9798646	7.9629436
NM_011577	Tgfb1	Transforming growth factor, beta 1	0.11987	5.655222283	0.490979393	0.633759967	0.760511961	6.1353986	5.2322026	5.3020142	5.5805612	5.7687156	5.6799486
NM_008361	Il1b	Interleukin 1 beta	0.214514333	8.0152477	0.426938686	0.678233358	0.797831134	9.1403526	7.2444306	7.9650722	8.3937792	8.7329756	7.8666436
NM_008501	Lif	Leukemia inhibitory factor	0.094527	8.660766617	0.416918045	0.685316487	0.797831134	9.0229606	8.3931566	8.8827652	9.0407282	8.5653426	8.9763926
NM_010202	Fgf4	Fibroblast growth factor 4	0.310437667	13.15846671	0.33369543	0.746031573	0.843340039	15.7587056	12.0835286	11.9845432	14.6997782	13.1345356	12.9237766
NM_008109	Gdf5	Growth differentiation factor 5	0.1980426	14.50696255	0.369629029	0.743298899	0.843340039	NA	14.3433456	NA	14.5413882	NA	NA
NM_010203	Fgf5	Fibroblast growth factor 5	-0.4238794	15.40041338	-0.320725165	0.757437972	0.844002311	15.4313276	18.8508646	13.6415922	15.5636512	15.5377796	NA
NM_010784	Mdk	Midkine	0.069794667	7.14173445	0.261850509	0.798612104	0.877348509	7.2993646	6.7121356	7.3918062	7.0937162	7.2065206	7.3124536
NM_021704	Cxcl12	Chemokine (C-X-C motif) ligand 12	-0.051308767	5.654867982	-0.238516064	0.816668381	0.88472408	NA	5.4173466	5.9094592	5.4864912	5.7919026	5.5578886
NM_013598	Kitl	Kit ligand	0.077338667	3.753494867	0.171595704	0.86708846	0.926478081	3.7911376	3.2883876	3.6808272	2.4931232	4.1888146	4.3104306
NM_010197	Fgf1	Fibroblast growth factor 1	-0.040779	8.064896117	-0.125388757	0.902635682	0.9514268	8.6988466	7.4211386	8.2531592	7.9792952	7.9601316	8.3113806
NM_010200	Fgf13	Fibroblast growth factor 13	0.018801333	8.592814033	0.071585439	0.944306322	0.956570041	8.8751626	8.5336686	8.8122092	8.7823912	8.3745446	9.1205086
NM_023304	Fgf22	Fibroblast growth factor 22	0.033272667	11.97653078	0.09309604	0.927617856	0.956570041	12.7242316	12.8126376	11.6822042	12.6812432	12.1661746	12.4714736
NM_010275	Gdnf	Glial cell line derived neurotrophic factor	0.037863	9.8568922	0.080869054	0.937099907	0.956570041	10.9995856	9.0196806	9.3310132	10.2032612	9.6690566	9.5915506
NM_009367	Tgfb2	Transforming growth factor, beta 2	0.007344	8.8581462	0.02657173	0.979310415	0.979310415	9.2531686	8.7206876	8.9670022	8.9693952	8.7022676	9.2912276

Appendix Table 2: RNA array comparison between the normalized cycle threshold (Ct) values of 84 growth factor genes from UNIIR and 4 DPI samples

NM_009756	Bmp10	Bone morphogenetic protein 10	NA	14.3355976	NA	NA	NA	NA	NA	NA	NA	NA	NA
NM_010204	Fgf6	Fibroblast growth factor 6	NA	17.3500847	NA	NA	NA	NA	NA	NA	NA	NA	NA
NM_008366	Il2	Interleukin 2	NA	14.61257653	NA	NA	NA	NA	NA	14.4339402	14.9101972	15.7739666	15.2352486
NM_010556	Il3	Interleukin 3	NA	14.34337152	NA	NA	NA	NA	NA	14.5231272	NA	NA	NA
NM_008493	Lep	Leptin	NA	19.7642197	NA	NA	NA	NA	NA	NA	NA	20.4319226	NA
NM_010834	Mstn	Myostatin	NA	15.6276996	NA	NA	NA	NA	16.3117006	NA	NA	NA	NA

Appendix Table 3: RNA array comparison between the normalized cycle threshold (Ct) values of 84 growth factor genes from UNIIR and 6 DPI samples

GeneBank	Symbol	Description	logFC	AveExpr	t	P.Value	adj.P.Val	Mock Irradiated			6 Days		
								PAMM041 Plate1	PAMM041 Plate2	PAMM041 Plate3	PAMM041 Plate1	PAMM041 Plate2	PAMM041 Plate3
NM_011313	S100a6	S100 calcium binding protein A6 (calcyclin)	-1.451708267	1.070665867	-6.131385346	9.90E-05	0.007724514	3.0630376	2.9841846	3.0664342	1.4843786	1.8758174	1.3983356
NM_010514	Igf2	Insulin-like growth factor 2	0.9630383	10.18495798	4.683490261	0.001057654	0.041248493	NA	9.7744106	9.8800972	10.7798226	10.7744304	10.8166236
NM_007553	Bmp2	Bone morphogenetic protein 2	1.2290694	6.18948745	4.022594318	0.002300266	0.059806905	5.5538156	5.5971856	6.5640362	7.5247016	6.6874354	7.1901086
NM_007558	Bmp8a	Bone morphogenetic protein 8a	0.949814067	7.019420283	3.816149521	0.003233789	0.063058894	6.4508076	6.0825956	6.8750462	7.6798226	7.1802404	7.3978286
NM_007555	Bmp5	Bone morphogenetic protein 5	0.769220067	5.8139917	3.238727617	0.008591268	0.096098009	5.8051126	5.0782476	5.6098372	6.5349666	5.9312304	6.3346606
NM_010272	Gdf11	Growth differentiation factor 11	1.010138133	9.077986527	3.316871865	0.00862418	0.096098009	NA	8.6629276	8.5397232	9.0185216	9.8332594	9.9826096
NM_010094	Lefty1	Left right determination factor 1	0.808546067	8.5232862	3.246210803	0.008481567	0.096098009	8.5418916	8.1262766	7.8896622	9.4566356	8.7300824	8.7967506
NM_011577	Tgfb1	Transforming growth factor, beta 1	0.749847067	5.655222283	3.071322745	0.011463614	0.111770239	6.1353986	5.2322026	5.3020142	6.4019866	6.2182094	6.2989606
NM_007950	Ereg	Epiregulin	-1.0579206	4.985225867	-2.757318959	0.01975643	0.154100157	7.8766046	6.4867596	6.9011292	5.6249286	6.6077654	5.8580376
NM_010512	Igf1	Insulin-like growth factor 1	-0.7452162	5.169512527	-2.862254168	0.018168152	0.154100157	NA	6.2589006	6.6587702	5.5104536	5.8429084	5.7874956
NM_007554	Bmp4	Bone morphogenetic protein 4	0.507558733	5.530883367	2.460404586	0.033065571	0.166642512	5.6185626	5.2013416	5.4223182	5.8868996	5.9036954	5.9743036
NM_007559	Bmp8b	Bone morphogenetic protein 8b	0.793470733	9.759587367	2.434298746	0.034592172	0.166642512	10.6243746	10.3265996	11.5622702	12.0737586	11.3642844	11.4556136
NM_010198	Fgf11	Fibroblast growth factor 11	0.788771067	8.684428533	2.406088468	0.036319522	0.166642512	8.3578896	7.9281556	8.0225572	8.8167476	8.3865424	9.4716256
NM_010201	Fgf14	Fibroblast growth factor 14	-0.702054267	9.910584867	-2.505085285	0.030604934	0.166642512	10.6179506	10.1717016	10.4141682	9.5277386	9.7654754	9.8044436
NM_008361	Il1b	Interleukin 1 beta	1.308394733	8.0152477	2.604041976	0.025780184	0.166642512	9.1403526	7.2444306	7.9650722	10.1529236	8.9653674	9.1567486
NM_010564	Inha	Inhibin alpha	1.0607068	11.07142589	2.586657311	0.028700018	0.166642512	NA	10.7289126	10.4156122	12.1887256	11.4240184	11.2861636
NM_008742	Ntf3	Neurotrophin 3	0.772507067	8.184056367	2.435745656	0.03450578	0.166642512	8.0675716	7.1573656	7.9336382	8.6442026	8.1379654	8.6939286
NM_011562	Tdgf1	Teratocarcinoma-derived growth factor 1	-3.0840111	16.71278144	-2.462667037	0.042042057	0.182182247	20.3083686	19.8610076	NA	NA	18.1051684	15.8961856
NM_008176	Cxcl1	Chemokine (C-X-C motif) ligand 1	-1.440399267	10.74938437	-2.24253639	0.048118971	0.197541038	13.3940856	12.1514456	12.0477552	11.0468096	12.1189434	10.1063356
NM_007557	Bmp7	Bone morphogenetic protein 7	0.4259504	7.304668867	2.175326024	0.053975943	0.200482073	7.9223216	7.3297156	7.7227622	8.0647806	8.0267554	8.1611146
NM_008007	Fgf3	Fibroblast growth factor 3	-1.354020867	13.8697248	-2.304101728	0.053297573	0.200482073	14.0930906	15.3398366	14.4587422	13.2765356	NA	NA
NM_010427	Hgf	Hepatocyte growth factor	0.611502133	7.523043345	2.106081934	0.063583371	0.225431951	NA	7.6953736	8.4841492	8.7107716	8.9223204	8.4706986
NM_008381	Inhbb	Inhibin beta-B	-0.7893416	9.220747617	-2.024273987	0.069725874	0.226609089	10.5652196	9.9916646	9.9804662	9.7358436	9.1278434	9.3056386
NM_177099	Lefty2	Left-right determination factor 2	1.7215696	17.96781106	2.302046357	0.066887954	0.226609089	NA	18.6455386	17.5709482	NA	19.5821354	20.0774906
NM_021283	Il4	Interleukin 4	1.532634467	12.0533028	1.956685817	0.081133671	0.253137053	NA	11.4042666	11.4354522	12.4903596	14.3424154	12.0247066
NM_008008	Fgf7	Fibroblast growth factor 7	0.586207733	8.584481283	1.86812682	0.090499973	0.271499918	9.0568086	7.9820726	8.3035972	9.1073166	8.5546434	9.4391416
NM_013518	Fgf9	Fibroblast growth factor 9	0.4971894	11.1144902	1.821795472	0.09769076	0.278794636	10.4335766	10.5219786	10.4836972	11.0546566	10.5117104	11.3644536
NM_010275	Gdnf	Glial cell line derived neurotrophic factor	0.816932067	9.8568922	1.744830669	0.110802996	0.278794636	10.9995856	9.0196806	9.3310132	10.7966326	10.0623354	10.9421076
NM_008351	Il12a	Interleukin 12A	1.862559067	13.99847037	1.746723037	0.110462258	0.278794636	14.1011056	11.8219306	12.2802152	14.7733856	14.2066094	14.8109336
NM_031199	Tgfa	Transforming growth factor alpha	-0.295800933	7.220880617	-1.764838439	0.107248261	0.278794636	7.4941846	7.3697266	7.4511782	7.2001316	6.9758984	7.2516566
NM_009506	Vegfc	Vascular endothelial growth factor C	0.388122733	9.746123117	1.784461755	0.103862999	0.278794636	9.7035556	9.3963526	9.5647672	9.8407256	9.7883484	10.1999696
NM_010200	Fgf13	Fibroblast growth factor 13	0.414845067	8.592814033	1.579508529	0.144489001	0.346698088	8.8751626	8.5336686	8.8122092	9.0395006	8.8529884	9.5730866
NM_008109	Gdf5	Growth differentiation factor 5	1.162918	14.50696255	2.170483779	0.14667996	0.346698088	NA	14.3433456	NA	NA	NA	15.5062636
NM_023304	Fgf22	Fibroblast growth factor 22	-0.549406267	11.97653078	-1.537224185	0.154446803	0.354319137	12.7242316	12.8126376	11.6822042	12.0632416	11.5783384	11.9292746
NM_007556	Bmp6	Bone morphogenetic protein 6	0.4599864	8.844636783	1.516900649	0.159442943	0.355329986	9.3180386	8.3203026	8.9154822	8.8897776	9.1374064	9.9065986



Appendix Table 3: RNA array comparison between the normalized cycle threshold (Ct) values of 84 growth factor genes from UNIIR and 6 DPI samples

NM_013609	Ngf	Nerve growth factor	-0.600911367	12.25852698	-1.453068993	0.179190452	0.37984801	NA	12.8177566	13.0810692	12.1017856	11.9166754	13.0270436
NM_009368	Tgfb3	Transforming growth factor, beta 3	-0.293378933	8.327371783	-1.438021413	0.180184313	0.37984801	9.0148256	8.5242746	8.6612152	8.3942066	8.4942254	8.4317466
NM_019400	Rabep1	Rabaptin, RAB GTPase binding effector protein 1	0.2530374	5.6005022	1.313813651	0.217490272	0.442705963	5.4960156	5.1741256	5.7678192	5.8098056	5.6188614	5.7684056
NM_009362	Tff1	Trefoil factor 1	-1.666677267	10.93600145	-1.301996022	0.221352981	0.442705963	11.3064826	12.3240246	15.4074662	9.2151176	14.3230554	10.4997686
NM_009367	Tgfb2	Transforming growth factor, beta 2	0.3517384	8.8581462	1.272644029	0.231191882	0.450824169	9.2531686	8.7206876	8.9670022	9.8198056	8.8824324	9.2938356
NM_021704	Cxcl12	Chemokine (C-X-C motif) ligand 12	0.265815967	5.654867982	1.235683146	0.246963229	0.451117279	NA	5.4173466	5.9094592	5.8385386	5.9292004	6.0199176
NM_008002	Fgf10	Fibroblast growth factor 10	0.580821067	9.978682783	1.201128737	0.256661392	0.451117279	11.2574046	9.5859006	9.8687822	10.7253126	10.4348524	11.2943856
NM_031168	Il6	Interleukin 6	0.818356467	11.67697153	1.183548083	0.266043523	0.451117279	NA	12.2604506	12.0721942	13.6840956	13.8308854	11.4390556
NM_008380	Inhba	Inhibin beta-A	-0.5885346	9.12383295	-1.206632593	0.254624394	0.451117279	10.5211856	8.7307816	11.0667442	9.2995316	9.4440984	9.8094776
NM_013598	Kitl	Kit ligand	0.530845067	3.753494867	1.177816181	0.265434036	0.451117279	3.7911376	3.2883876	3.6808272	4.2840666	3.5405324	4.5282886
NM_198190	Ntf5	Neurotrophin 5	-0.470437267	12.3053502	-1.200335036	0.256956215	0.451117279	14.4148456	13.7942406	12.8395372	13.6030856	13.2137994	12.8204266
NM_009755	Bmp1	Bone morphogenetic protein 1	0.2876534	6.8769237	1.074785933	0.307065154	0.50959749	7.0603256	6.3236306	7.0829282	7.3096286	6.8446454	7.1755706
NM_009263	Spp1	Secreted phosphoprotein 1	-0.9452706	7.8554667	-1.021209439	0.330601298	0.537227109	9.9680006	8.4657956	9.1258262	7.6719986	6.8550944	10.1967176
NM_009969	Csf2	Colony stimulating factor 2 (granulocyte-macrophage)	0.430381733	11.28337253	0.946354283	0.365695219	0.582127084	11.0947516	9.8922346	11.6219092	11.7746856	10.9846794	11.1406756
NM_010203	Fgf5	Fibroblast growth factor 5	-1.1936953	15.40041338	-0.903200586	0.395347231	0.582572257	15.4313276	18.8508646	13.6415922	15.1108086	14.4509904	NA
NM_010205	Fgf8	Fibroblast growth factor 8	0.589285067	15.13678162	0.880455845	0.398741352	0.582572257	14.4513626	14.0275456	16.5623042	14.8826856	16.3644554	15.5619266
NM_010216	Figf	C-fos induced growth factor	0.265052067	8.76661645	0.871632316	0.403319255	0.582572257	9.4802056	8.4658226	9.1185672	8.9482096	9.5535864	9.3579556
NM_010784	Mdk	Midkine	0.236523067	7.14173445	0.887369887	0.395179403	0.582572257	7.2993646	6.7121356	7.3918062	7.4618416	6.9087254	7.7423086
NM_011697	Vegfb	Vascular endothelial growth factor B	0.175961067	7.4733892	0.884809132	0.396496055	0.582572257	7.3712026	7.5055296	6.9793652	7.2507166	7.4441144	7.6891496
NM_009711	Artn	Artemin	-0.194867933	9.52028395	-0.75946723	0.464643417	0.624865285	10.2639236	9.6049026	9.9281242	9.2714256	9.9152904	10.0256306
NM_007778	Csf1	Colony stimulating factor 1 (macrophage)	0.2280694	7.640046867	0.787591006	0.448725787	0.624865285	8.3771456	7.2941266	7.5068442	7.9031236	7.9736514	7.9855496
NM_145741	Gdf10	Growth differentiation factor 10	0.621077733	12.08812053	0.771619109	0.457721593	0.624865285	13.0936396	10.6253356	10.8201742	11.7014536	12.6307694	12.0701596
NM_010554	Il1a	Interleukin 1 alpha	0.422967067	8.893557367	0.775192585	0.455698841	0.624865285	9.3563216	9.1697366	9.0616982	9.2061936	9.2905634	10.3599006
NM_007540	Bdnf	Brain derived neurotrophic factor	-0.4310006	11.88260395	-0.73015554	0.481613437	0.63670929	12.6153106	13.5828136	13.1313542	12.6869316	12.5842984	12.7652466
NM_010197	Fgf1	Fibroblast growth factor 1	0.190102733	8.064896117	0.584534819	0.5714735	0.736617424	8.6988466	7.4211386	8.2531592	8.0887406	8.1909234	8.6637886
NM_008501	Lif	Leukemia inhibitory factor	0.130923733	8.660766617	0.577448422	0.576072601	0.736617424	9.0229606	8.3931566	8.8827652	9.0072956	8.9438284	8.7405296
NM_008371	Il7	Interleukin 7	-0.135975367	8.0910868	-0.558176284	0.589944368	0.742188076	NA	8.3388656	7.9094442	8.2308096	7.6080954	8.1256336
NM_010113	Egf	Epidermal growth factor	-0.166134933	10.77793162	-0.458383847	0.656220548	0.812463535	11.1442206	10.8136886	11.2250072	11.1577716	10.5395234	10.9872166
NM_013611	Nodal	Nodal	-0.2529174	13.95672689	-0.41319466	0.691374837	0.835246076	NA	15.0232966	13.4918702	13.8549916	14.1543404	NA
NM_009505	Vegfa	Vascular endothelial growth factor A	-0.0905596	3.838946117	-0.401834645	0.696038397	0.835246076	3.9847886	3.3746376	3.7957642	3.5178586	3.5448954	3.8207576
NM_007445	Amh	Anti-Mullerian hormone	-0.3230326	17.11161137	-0.351126097	0.732588194	0.852863867	15.5812986	18.2167106	19.0645092	17.4380716	16.6970154	17.7583336
NM_010202	Fgf4	Fibroblast growth factor 4	0.378545033	13.15846671	0.36394721	0.724057559	0.852863867	15.7587056	12.0835286	11.9845432	13.1673996	14.1408754	NA
NM_009971	Csf3	Colony stimulating factor 3 (granulocyte)	-0.4849223	13.82481198	-0.305042126	0.767069945	0.86850717	16.3707856	14.7968256	13.5958202	NA	17.3785454	11.4938976
NM_008003	Fgf15	Fibroblast growth factor 15	-0.2828566	15.90422212	-0.302516618	0.768294804	0.86850717	18.8327256	15.2081336	18.7683662	16.9404786	16.3572404	18.6629366
NM_008005	Fgf18	Fibroblast growth factor 18	0.1139524	12.19765912	0.253423531	0.80494049	0.896933689	13.3401656	12.8539406	12.0933502	13.1929956	11.8461584	13.5901596
NM_008004	Fgf17	Fibroblast growth factor 17	0.1634623	16.06200877	0.198663496	0.851623537	0.909953916	NA	NA	16.0067922	15.6676786	16.6728304	NA
NM_008360	Il18	Interleukin 18	0.0546264	1.433462283	0.198755685	0.846332332	0.909953916	1.3350986	0.5841806	1.0940462	0.9315356	0.9711224	1.2745466

Appendix Table 3: RNA array comparison between the normalized cycle threshold (Ct) values of 84 growth factor genes from UNIIR and 6 DPI samples

NM_008808	Pdgfa	Platelet derived growth factor, alpha	-0.056076267	6.65306195	-0.192123806	0.851389868	0.909953916	7.1911226	6.3190366	6.3524622	6.8523856	6.0573784	6.7846286
NM_008827	Pgf	Placental growth factor	-0.0539276	9.671740617	-0.147271693	0.885767837	0.93364718	10.5762326	9.6847136	9.9495492	10.8322756	9.9708834	9.2455536
NM_173404	Bmp3	Bone morphogenetic protein 3	0.024450067	6.965816283	0.074684889	0.941899754	0.979575744	6.9570366	6.1405106	7.2540622	6.8522316	6.6132294	6.9594986
NM_008006	Fgf2	Fibroblast growth factor 2	0.013684067	8.78776095	0.039068933	0.969584263	0.995099638	10.1883416	9.2035826	9.1711342	9.6422596	9.1029214	9.8589296
NM_008350	Il11	Interleukin 11	0.001883067	11.42749745	0.003465724	0.997301136	0.997301136	13.4814356	12.0462936	11.6978712	12.8198886	12.2292994	12.1820616
NM_053009	Zfp91	Zinc finger protein 91	0.0029204	2.9857062	0.015819081	0.987681739	0.997301136	3.1982956	2.6738356	2.9852802	2.8793976	3.0859634	2.9008116
NM_009756	Bmp10	Bone morphogenetic protein 10	NA	14.3355976	NA	NA	NA	NA	NA	NA	NA	14.4557354	NA
NM_010204	Fgf6	Fibroblast growth factor 6	NA	17.3500847	NA	NA	NA	NA	NA	NA	NA	NA	14.7301396
NM_008366	Il2	Interleukin 2	NA	14.61257653	NA	NA	NA	NA	NA	14.4339402	NA	NA	NA
NM_010556	Il3	Interleukin 3	NA	14.34337152	NA	NA	NA	NA	NA	14.5231272	NA	12.7595154	NA
NM_008493	Lep	Leptin	NA	19.7642197	NA	NA	NA	NA	NA	NA	NA	NA	NA
NM_010834	Mstn	Myostatin	NA	15.6276996	NA	NA	NA	NA	16.3117006	NA	NA	NA	14.9436986