

Supplementary Data

NHR-23 dependent collagen and hedgehog-related genes required for molting

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Supplementary Table S1. Primers used for expression analysis

Gene	forward	reverse	Primer No. forward	Primer No. reverse	Amplicon length bp	probe number or sequence
<i>wrt-1</i>	cgaatgtgagaaaaataacttctgg	gcagttcatacgggtgacag	7337	7338	71	123
<i>wrt-2</i>	tggagaacaagaaacgagaaaac	aagctgttggggtggtg	7339	7340	78	70
<i>wrt-4</i>	ggaggaattgcaccagtcac	gtgcagcactttaggcaac	7341	7342	62	119
<i>ama-1</i>	gagtcatagatcgtcgtggaagatg	tgagaagccgtccgcagtag	ama-1 F	ama-1 R	202	cccgatttcacattggattccctcaca
<i>dpy-2</i>	ccagctccacgtgataatgtt	ccgtcgtttgactctgagaa	7381	7382	67	156
<i>dpy-3</i>	ggagcaccaggaagacca	cgaagaagtgtccgtct	7327	7328	60	131
<i>dpy-7</i>	cagcattgccagtgct	atgttgcgagcaacgaact	7335	7336	120	125
<i>dpy-8</i>	aaactatgtgaccagaaagagg	atgcattcggttagcgtagg	7329	7330	67	74

Primers and probes were designed using the Probe Finder software (www.roche-applied-science.com from F. Hoffmann-La Roche Ltd, Switzerland);

ama-1 is labeled with DYXL dye.

Supplementary Table S2. Genes identified as decreased in *nhr-23* RNAi microarray experiment

Gene WB ID	Gene Public Name	Sequence Name (Gene)	Oligo Set
WBGene00000029	abu-6	C03A7.7	172323 x at
WBGene00000030	abu-7	C03A7.8	172321 x at
WBGene00000031	abu-8	C03A7.14	172587 x at
WBGene00000033	abu-10	F35A5.3	179983 at
WBGene00000034	abu-11	T01D1.6	173482 s at
WBGene00000039	acn-1	C42D8.5	188527 s at
WBGene00000220	atf-2	K08F8.2	189943 at
WBGene00000248	ben-1	C54C6.2	174883 s at
WBGene00000399	cdh-7	R05H10.6	190177 at
WBGene00000402	cdh-10	C45G7.5	180954 at
WBGene00000618	col-41	T10B10.1	190134 s at
WBGene00000665	col-90	C29E4.1	177024 at
WBGene00000697	col-123	W08D2.6	188339 at
WBGene00000702	col-128	F12F6.9	188345 s at
WBGene00000882	cyn-6	F42G9.2	188525 at
WBGene00000902	daf-6	F31F6.5	187906 at
WBGene00000905	daf-9	T13C5.1	189420 at
WBGene00000928	dao-2	M03A1.7	180375 at
WBGene00000979	dhs-16	C10F3.2	191950 at
WBGene00000992	dhs-29	F27D9.6	179799 s at
WBGene00001064	dpy-2	T14B4.6	173355 s at
WBGene00001065	dpy-3	EGAP7.1	189723 s at
WBGene00001067	dpy-5	F27C1.8	190360 s at
WBGene00001069	dpy-7	F46C8.6	192146 s at
WBGene00001070	dpy-8	C31H2.2	190446 s at
WBGene00001071	dpy-9	T21D12.2	190013 at
WBGene00001072	dpy-10	T14B4.7	175025 at
WBGene00001079	dpy-20	T22B3.1	191799 at
WBGene00001410	feh-1	Y54F10AM.2	174646 at
WBGene00001470	flt-1	ZK783.4	174909 at
WBGene00001478	fmo-3	Y39A1A.19	194135 at
WBGene00001479	fmo-4	F53F4.5	175245 at
WBGene00001570	gei-13	F58A4.11	188593 at
WBGene00001633	gly-8	Y66A7A.6	190302 at
WBGene00001694	grd-5	F41E6.2	180979 at
WBGene00001695	grd-6	T18H9.1	188028 at
WBGene00001703	grd-14	T01B10.2	185646 at
WBGene00001714	grl-5	Y47D7A.5	176327 s at
WBGene00001716	grl-7	T02E9.2	173004 s at
WBGene00001724	grl-15	Y75B8A.20	185468 at
WBGene00001730	grl-21	ZC168.5	178129 at
WBGene00002039	hum-6	T10H10.1	189790 s at
WBGene00002087	ins-4	ZK75.1	188314 at
WBGene00002088	ins-5	ZK84.3	188319 at
WBGene00002393	lpr-1	Y65B4BR.2	186995 at
WBGene00003057	lon-3	ZK836.1	188368 at

WBGene00003523	<u><i>nas-4</i></u>	<u><i>C05D11.6</i></u>	<u>190861 at</u>
WBGene00003553	<u><i>nas-37</i></u>	<u><i>C17G1.6</i></u>	<u>190032 s at</u>
WBGene00003681	<u><i>nhr-91</i></u>	<u><i>Y15E3A.1</i></u>	<u>193433 at</u>
WBGene00003769	<u><i>nlp-31</i></u>	<u><i>B0213.6</i></u>	<u>172343 x at</u>
WBGene00003968	<u><i>peb-1</i></u>	<u><i>T14F9.4</i></u>	<u>188015 at</u>
WBGene00004017	<u><i>phg-1</i></u>	<u><i>F27E5.4</i></u>	<u>193258 at</u>
WBGene00004091	<u><i>pps-1</i></u>	<u><i>T14G10.1</i></u>	<u>191504 at</u>
WBGene00004099	<u><i>pqn-5</i></u>	<u><i>C03A7.4</i></u>	<u>172360 x at</u>
WBGene00004104	<u><i>pqn-13</i></u>	<u><i>C14C11.8</i></u>	<u>185795 at</u>
WBGene00004133	<u><i>pqn-46</i></u>	<u><i>F57B9.9</i></u>	<u>183975 s at</u>
WBGene00004174	<u><i>pqn-95</i></u>	<u><i>ZK1067.7</i></u>	<u>174071 at</u>
WBGene00004210	<u><i>ptc-3</i></u>	<u><i>Y110A2AL.8</i></u>	<u>187353 s at</u>
WBGene00004219	<u><i>ptr-4</i></u>	<u><i>C45B2.7</i></u>	<u>172991 at</u>
WBGene00004224	<u><i>ptr-10</i></u>	<u><i>F55F8.1</i></u>	<u>188170 at</u>
WBGene00004225	<u><i>ptr-11</i></u>	<u><i>F56C11.2</i></u>	<u>171745 x at</u>
WBGene00004232	<u><i>ptr-18</i></u>	<u><i>Y38F1A.3</i></u>	<u>188188 s at</u>
WBGene00004259	<u><i>pyr-1</i></u>	<u><i>D2085.1</i></u>	<u>173131 at</u>
WBGene00004264	<u><i>qua-1</i></u>	<u><i>T05C12.10</i></u>	<u>190479 s at</u>
WBGene00004300	<u><i>ram-2</i></u>	<u><i>F38A3.2</i></u>	<u>188311 s at</u>
WBGene00004397	<u><i>rol-6</i></u>	<u><i>T01B7.7</i></u>	<u>192682 at</u>
WBGene00004398	<u><i>rol-8</i></u>	<u><i>ZK1290.3</i></u>	<u>192967 at</u>
WBGene00004978	<u><i>spq-7</i></u>	<u><i>Y47G6A.10</i></u>	<u>188388 at</u>
WBGene00004998	<u><i>spp-13</i></u>	<u><i>F08F1.6</i></u>	<u>181681 at</u>
WBGene00005016	<u><i>sqt-1</i></u>	<u><i>B0491.2</i></u>	<u>192674 s at</u>
WBGene00005017	<u><i>sqt-2</i></u>	<u><i>C01B12.1</i></u>	<u>190091 at</u>
WBGene00005018	<u><i>sqt-3</i></u>	<u><i>F23H12.4</i></u>	<u>174910 at</u>
WBGene00006366	<u><i>sym-1</i></u>	<u><i>C44H4.3</i></u>	<u>193344 at</u>
WBGene00006370	<u><i>sym-5</i></u>	<u><i>C44H4.2</i></u>	<u>173271 s at</u>
WBGene00006750	<u><i>unc-10</i></u>	<u><i>T10A3.1</i></u>	<u>173800 at</u>
WBGene00006875	<u><i>vab-9</i></u>	<u><i>T22C8.8</i></u>	<u>177583 at</u>
WBGene00006912	<u><i>vha-3</i></u>	<u><i>Y38F2AL.4</i></u>	<u>177110 s at</u>
WBGene00006947	<u><i>wrt-1</i></u>	<u><i>ZK1290.12</i></u>	<u>191180 at</u>
WBGene00006948	<u><i>wrt-2</i></u>	<u><i>F52E4.6</i></u>	<u>188061 s at</u>
WBGene00006950	<u><i>wrt-4</i></u>	<u><i>ZK678.5</i></u>	<u>190340 s at</u>
WBGene00006956	<u><i>wrt-10</i></u>	<u><i>ZK1290.8</i></u>	<u>184676 s at</u>
WBGene00007056	<u><i>tag-198</i></u>	<u><i>F09G8.2</i></u>	<u>176158 at</u>
WBGene00007152	<u><i>clec-225</i></u>	<u><i>B0365.5</i></u>	<u>189983 at</u>
WBGene00007174	<u><i>B0395.2</i></u>	<u><i>B0395.2</i></u>	<u>190760 at</u>
WBGene00007214	<u><i>C01A2.2</i></u>	<u><i>C01A2.2</i></u>	<u>177410 at</u>
WBGene00007252	<u><i>C01H6.2</i></u>	<u><i>C01H6.2</i></u>	<u>190335 s at</u>
WBGene00007264	<u><i>C02F4.4</i></u>	<u><i>C02F4.4</i></u>	<u>177870 at</u>
WBGene00007344	<u><i>C05E7.2</i></u>	<u><i>C05E7.2</i></u>	<u>177489 at</u>
WBGene00007479	<u><i>C09F9.2</i></u>	<u><i>C09F9.2</i></u>	<u>177549 s at</u>
WBGene00007552	<u><i>C13C12.2</i></u>	<u><i>C13C12.2</i></u>	<u>180960 at</u>
WBGene00007560	<u><i>C14A4.9</i></u>	<u><i>C14A4.9</i></u>	<u>178508 at</u>
WBGene00007938	<u><i>C34F6.1</i></u>	<u><i>C34F6.1</i></u>	<u>193974 s at</u>
WBGene00007994	<u><i>C37E2.2</i></u>	<u><i>C37E2.2</i></u>	<u>193164 at</u>
WBGene00007999	<u><i>tag-297</i></u>	<u><i>C38C6.6</i></u>	<u>179686 at</u>
WBGene00008292	<u><i>C54C8.4</i></u>	<u><i>C54C8.4</i></u>	<u>189874 at</u>
WBGene00008486	<u><i>ugt-44</i></u>	<u><i>F01D4.2</i></u>	<u>191445 at</u>
WBGene00008492	<u><i>F01D5.1</i></u>	<u><i>F01D5.1</i></u>	<u>178017 s at</u>
WBGene00008496	<u><i>F01D5.6</i></u>	<u><i>F01D5.6</i></u>	<u>178244 at</u>

WBGene00008511	<u>F01G10.9</u>	<u>F01G10.9</u>	<u>174273 at</u>
WBGene00008549	<u>din-1</u>	<u>F07A11.6</u>	<u>193843 s at</u>
WBGene00008605	<u>mlt-9</u>	<u>F09B12.1</u>	<u>184828 s at</u>
WBGene00008743	<u>F13D12.9</u>	<u>F13D12.9</u>	<u>180072 s at</u>
WBGene00008851	<u>F15B9.8</u>	<u>F15B9.8</u>	<u>191688 at</u>
WBGene00008865	<u>F15G9.1</u>	<u>F15G9.1</u>	<u>171746 x at</u>
WBGene00008963	<u>F19H8.2</u>	<u>F19H8.2</u>	<u>178930 at</u>
WBGene00008967	<u>F20B10.3</u>	<u>F20B10.3</u>	<u>183717 at</u>
WBGene00008987	<u>F20G2.3</u>	<u>F20G2.3</u>	<u>179155 s at</u>
WBGene00009094	<u>F23H12.5</u>	<u>F23H12.5</u>	<u>191805 s at</u>
WBGene00009108	<u>F25D1.3</u>	<u>F25D1.3</u>	<u>178006 at</u>
WBGene00009331	<u>F32D8.7</u>	<u>F32D8.7</u>	<u>193677 at</u>
WBGene00009423	<u>F35E8.10</u>	<u>F35E8.10</u>	<u>183700 s at</u>
WBGene00009573	<u>F40E10.5</u>	<u>F40E10.5</u>	<u>181113 at</u>
WBGene00009678	<u>F44D12.1</u>	<u>F44D12.1</u>	<u>191627 at</u>
WBGene00009717	<u>dep-1</u>	<u>F44G4.8</u>	<u>191570 s at</u>
WBGene00009791	<u>F46F3.3</u>	<u>F46F3.3</u>	<u>178165 at</u>
WBGene00009799	<u>lqc-47</u>	<u>F47A4.1</u>	<u>190673 s at</u>
WBGene00009816	<u>F47B10.5</u>	<u>F47B10.5</u>	<u>180523 at</u>
WBGene00009888	<u>F49E2.5</u>	<u>F49E2.5</u>	<u>180098 s at</u>
WBGene00009889	<u>F49E11.2</u>	<u>F49E11.2</u>	<u>192248 at</u>
WBGene00009926	<u>noah-2</u>	<u>F52B11.3</u>	<u>181136 s at</u>
WBGene00009983	<u>F53F1.5</u>	<u>F53F1.5</u>	<u>172799 x at</u>
WBGene00010078	<u>acl-10</u>	<u>F55A11.5</u>	<u>193442 at</u>
WBGene00010267	<u>lips-9</u>	<u>F58G1.5</u>	<u>178343 s at</u>
WBGene00010285	<u>F58H1.2</u>	<u>F58H1.2</u>	<u>179510 at</u>
WBGene00010291	<u>F58H10.1</u>	<u>F58H10.1</u>	<u>181912 at</u>
WBGene00010321	<u>F59B10.5</u>	<u>F59B10.5</u>	<u>187247 at</u>
WBGene00010418	<u>H27A22.1</u>	<u>H27A22.1</u>	<u>189612 at</u>
WBGene00010573	<u>K04H4.2</u>	<u>K04H4.2</u>	<u>190901 s at</u>
WBGene00010621	<u>K07A12.2</u>	<u>K07A12.2</u>	<u>194069 s at</u>
WBGene00010673	<u>K08E7.5</u>	<u>K08E7.5</u>	<u>174508 s at</u>
WBGene00010714	<u>K09B11.10</u>	<u>K09B11.10</u>	<u>184682 s at</u>
WBGene00010835	<u>M03B6.3</u>	<u>M03B6.3</u>	<u>179034 s at</u>
WBGene00011107	<u>R07E3.6</u>	<u>R07E3.6</u>	<u>178194 at</u>
WBGene00011112	<u>R07E5.4</u>	<u>R07E5.4</u>	<u>188853 at</u>
WBGene00011235	<u>R11A5.7</u>	<u>R11A5.7</u>	<u>172989 s at</u>
WBGene00011313	<u>T01B7.8</u>	<u>T01B7.8</u>	<u>177804 at</u>
WBGene00011487	<u>T05E12.6</u>	<u>T05E12.6</u>	<u>184116 s at</u>
WBGene00011548	<u>T06G6.6</u>	<u>T06G6.6</u>	<u>177505 at</u>
WBGene00011590	<u>bus-19</u>	<u>T07F10.4</u>	<u>192607 at</u>
WBGene00011796	<u>T16G1.2</u>	<u>T16G1.2</u>	<u>178131 at</u>
WBGene00011831	<u>T19B10.2</u>	<u>T19B10.2</u>	<u>181714 at</u>
WBGene00011869	<u>dod-6</u>	<u>T20G5.7</u>	<u>172218 x at</u>
WBGene00011870	<u>T20G5.8</u>	<u>T20G5.8</u>	<u>172248 x at</u>
WBGene00012032	<u>T26C5.2</u>	<u>T26C5.2</u>	<u>177643 at</u>
WBGene00012186	<u>mlt-11</u>	<u>W01F3.3</u>	<u>194086 at</u>
WBGene00012239	<u>W04A8.4</u>	<u>W04A8.4</u>	<u>178654 s at</u>
WBGene00012255	<u>W04G3.1</u>	<u>W04G3.1</u>	<u>177724 at</u>
WBGene00012256	<u>W04G3.2</u>	<u>W04G3.2</u>	<u>173579 s at</u>
WBGene00012257	<u>lpr-4</u>	<u>W04G3.3</u>	<u>177916 at</u>
WBGene00012261	<u>lpr-3</u>	<u>W04G3.8</u>	<u>177650 at</u>

WBGene00012348	<u><i>pptr-1</i></u>	<u>W08G11.4</u>	<u>191709 at</u>
WBGene00012383	<u><i>ttr-17</i></u>	<u>Y5F2A.2</u>	<u>190906 at</u>
WBGene00012403	<u><i>srz-45</i></u>	<u>Y6G8.1</u>	<u>177363 at</u>
WBGene00012429	<u>Y11D7A.5</u>	<u>Y11D7A.5</u>	<u>183724 at</u>
WBGene00012433	<u>Y11D7A.9</u>	<u>Y11D7A.9</u>	<u>182561 at</u>
WBGene00012540	<u>Y37A1B.7</u>	<u>Y37A1B.7</u>	<u>182386 s at</u>
WBGene00012545	<u>Y37D8A.3</u>	<u>Y37D8A.3</u>	<u>182387 at</u>
WBGene00012628	<u>Y38H6C.16</u>	<u>Y38H6C.16</u>	<u>186502 at</u>
WBGene00012635	<u>Y38H8A.1</u>	<u>Y38H8A.1</u>	<u>180611 at</u>
WBGene00012796	<u>Y43F4A.1</u>	<u>Y43F4A.1</u>	<u>192483 at</u>
WBGene00012942	<u>Y47D3B.6</u>	<u>Y47D3B.6</u>	<u>182743 at</u>
WBGene00013079	<u><i>ttr-26</i></u>	<u>Y51A2D.11</u>	<u>191333 at</u>
WBGene00013225	<u>Y56A3A.2</u>	<u>Y56A3A.2</u>	<u>183427 s at</u>
WBGene00013681	<u>Y105E8A.24</u>	<u>Y105E8A.24</u>	<u>173361 s at</u>
WBGene00013693	<u>Y105E8B.9</u>	<u>Y105E8B.9</u>	<u>176434 s at</u>
WBGene00014182	<u>ZK1025.2</u>	<u>ZK1025.2</u>	<u>184102 s at</u>
WBGene00014183	<u>ZK1025.3</u>	<u>ZK1025.3</u>	<u>182104 at</u>
WBGene00014184	<u>ZK1025.4</u>	<u>ZK1025.4</u>	<u>172191 x at</u>
WBGene00015019	<u>B0205.4</u>	<u>B0205.4</u>	<u>181640 at</u>
WBGene00015142	<u>B0310.6</u>	<u>B0310.6</u>	<u>187570 at</u>
WBGene00015300	<u>C01F1.5</u>	<u>C01F1.5</u>	<u>184053 at</u>
WBGene00015339	<u>C02E7.6</u>	<u>C02E7.6</u>	<u>171796 x at</u>
WBGene00015510	<u>C06A6.5</u>	<u>C06A6.5</u>	<u>183138 at</u>
WBGene00015545	<u>C06G1.1</u>	<u>C06G1.1</u>	<u>183120 at</u>
WBGene00015553	<u><i>trxr-1</i></u>	<u>C06G3.7</u>	<u>193643 s at</u>
WBGene00015646	<u><i>mlt-10</i></u>	<u>C09E8.3</u>	<u>171945 x at</u>
WBGene00015769	<u>C14C11.7</u>	<u>C14C11.7</u>	<u>186432 at</u>
WBGene00015781	<u>C14F11.6</u>	<u>C14F11.6</u>	<u>193712 s at</u>
WBGene00015795	<u>C15F1.2</u>	<u>C15F1.2</u>	<u>181480 at</u>
WBGene00015841	<u>C16C8.2</u>	<u>C16C8.2</u>	<u>190213 s at</u>
WBGene00016018	<u>C23H3.2</u>	<u>C23H3.2</u>	<u>182261 at</u>
WBGene00016022	<u>C23H3.9</u>	<u>C23H3.9</u>	<u>182086 s at</u>
WBGene00016029	<u>C24A1.2</u>	<u>C24A1.2</u>	<u>174326 s at</u>
WBGene00016046	<u>C24B5.4</u>	<u>C24B5.4</u>	<u>182933 at</u>
WBGene00016133	<u>C26B9.3</u>	<u>C26B9.3</u>	<u>180439 at</u>
WBGene00016138	<u><i>flh-2</i></u>	<u>C26E6.2</u>	<u>181406 at</u>
WBGene00016329	<u><i>osr-1</i></u>	<u>C32E12.3</u>	<u>191522 s at</u>
WBGene00016422	<u><i>noah-1</i></u>	<u>C34G6.6</u>	<u>183775 at</u>
WBGene00016429	<u>C35A11.2</u>	<u>C35A11.2</u>	<u>184813 at</u>
WBGene00016596	<u>C42D4.3</u>	<u>C42D4.3</u>	<u>180540 at</u>
WBGene00016996	<u>D1005.2</u>	<u>D1005.2</u>	<u>182178 at</u>
WBGene00017201	<u><i>grsp-4</i></u>	<u>F07C4.7</u>	<u>180474 at</u>
WBGene00017212	<u>F07E5.7</u>	<u>F07E5.7</u>	<u>180026 at</u>
WBGene00017307	<u>F09F9.2</u>	<u>F09F9.2</u>	<u>183159 at</u>
WBGene00017340	<u>F10D7.3</u>	<u>F10D7.3</u>	<u>189407 at</u>
WBGene00017420	<u>F13B9.2</u>	<u>F13B9.2</u>	<u>182515 at</u>
WBGene00017483	<u><i>lqc-22</i></u>	<u>F15E6.2</u>	<u>181326 at</u>
WBGene00017535	<u>F17A9.3</u>	<u>F17A9.3</u>	<u>191134 at</u>
WBGene00017560	<u>F18C5.5</u>	<u>F18C5.5</u>	<u>180882 s at</u>
WBGene00017716	<u>F22F4.1</u>	<u>F22F4.1</u>	<u>182812 at</u>
WBGene00017937	<u>F30H5.3</u>	<u>F30H5.3</u>	<u>191217 s at</u>
WBGene00017991	<u><i>clec-180</i></u>	<u>F32E10.3</u>	<u>192712 at</u>

WBGene00017998	<u>F33D4.6</u>	<u>F33D4.6</u>	<u>185424 s at</u>
WBGene00018162	<u>nspb-3</u>	<u>F38A5.5</u>	<u>172417 x at</u>
WBGene00018167	<u>nspb-4</u>	<u>F38A5.10</u>	<u>185454 s at</u>
WBGene00018297	<u>F41F3.3</u>	<u>F41F3.3</u>	<u>172741 x at</u>
WBGene00018418	<u>F44E2.4</u>	<u>F44E2.4</u>	<u>175015 at</u>
WBGene00018510	<u>F46F11.7</u>	<u>F46F11.7</u>	<u>184462 at</u>
WBGene00018514	<u>F46G11.1</u>	<u>F46G11.1</u>	<u>184787 at</u>
WBGene00018515	<u>F46G11.2</u>	<u>F46G11.2</u>	<u>184787 at</u>
WBGene00018616	<u>F48G7.5</u>	<u>F48G7.5</u>	<u>183665 s at</u>
WBGene00018694	<u>F52E1.5</u>	<u>F52E1.5</u>	<u>180948 at</u>
WBGene00018706	<u>F52F10.2</u>	<u>F52F10.2</u>	<u>175060 at</u>
WBGene00018737	<u>F53B1.4</u>	<u>F53B1.4</u>	<u>193327 at</u>
WBGene00018738	<u>F53B1.6</u>	<u>F53B1.6</u>	<u>180743 at</u>
WBGene00018928	<u>F56B3.2</u>	<u>F56B3.2</u>	<u>187757 s at</u>
WBGene00018965	<u>F56D2.3</u>	<u>F56D2.3</u>	<u>182923 at</u>
WBGene00019021	<u>F57H12.6</u>	<u>F57H12.6</u>	<u>186012 s at</u>
WBGene00019148	<u>H03E18.1</u>	<u>H03E18.1</u>	<u>174628 s at</u>
WBGene00019154	<u>glf-1</u>	<u>H04M03.4</u>	<u>186362 s at</u>
WBGene00019198	<u>H14E04.1</u>	<u>H14E04.1</u>	<u>186267 at</u>
WBGene00019212	<u>H19M22.3</u>	<u>H19M22.3</u>	<u>188528 at</u>
WBGene00019236	<u>H23N18.5</u>	<u>H23N18.5</u>	<u>185593 at</u>
WBGene00019268	<u>H41C03.1</u>	<u>H41C03.1</u>	<u>185591 at</u>
WBGene00019272	<u>H42K12.3</u>	<u>H42K12.3</u>	<u>173124 s at</u>
WBGene00019285	<u>cbn-1</u>	<u>K01A2.11</u>	<u>187124 s at</u>
WBGene00019318	<u>K02E10.4</u>	<u>K02E10.4</u>	<u>185492 at</u>
WBGene00019346	<u>K02G10.5</u>	<u>K02G10.5</u>	<u>192258 s at</u>
WBGene00019520	<u>K08B12.1</u>	<u>K08B12.1</u>	<u>185835 at</u>
WBGene00019604	<u>K09H11.7</u>	<u>K09H11.7</u>	<u>190688 s at</u>
WBGene00019660	<u>K11H12.4</u>	<u>K11H12.4</u>	<u>184313 s at</u>
WBGene00019759	<u>M03F4.6</u>	<u>M03F4.6</u>	<u>174254 at</u>
WBGene00019772	<u>M04G7.1</u>	<u>M04G7.1</u>	<u>180311 at</u>
WBGene00019839	<u>R02F11.1</u>	<u>R02F11.1</u>	<u>185334 s at</u>
WBGene00019942	<u>R07G3.6</u>	<u>R07G3.6</u>	<u>187228 at</u>
WBGene00020083	<u>R57.2</u>	<u>R57.2</u>	<u>177325 at</u>
WBGene00020200	<u>T04A6.1</u>	<u>T04A6.1</u>	<u>182798 at</u>
WBGene00020237	<u>phat-4</u>	<u>T05B4.3</u>	<u>182573 at</u>
WBGene00020250	<u>T05C1.3</u>	<u>T05C1.3</u>	<u>181888 at</u>
WBGene00020426	<u>T10H10.2</u>	<u>T10H10.2</u>	<u>186136 at</u>
WBGene00020501	<u>T14B4.5</u>	<u>T14B4.5</u>	<u>183942 s at</u>
WBGene00020554	<u>T19A5.3</u>	<u>T19A5.3</u>	<u>183911 at</u>
WBGene00020626	<u>T20F5.4</u>	<u>T20F5.4</u>	<u>173494 s at</u>
WBGene00020704	<u>T22F7.5</u>	<u>T22F7.5</u>	<u>182080 at</u>
WBGene00020734	<u>tag-249</u>	<u>T23F2.1</u>	<u>190020 at</u>
WBGene00020806	<u>T25F10.3</u>	<u>T25F10.3</u>	<u>186385 at</u>
WBGene00020846	<u>T27A10.6</u>	<u>T27A10.6</u>	<u>174781 at</u>
WBGene00020911	<u>cpt-6</u>	<u>W01A11.5</u>	<u>192205 s at</u>
WBGene00021084	<u>W08E12.3</u>	<u>W08E12.3</u>	<u>172503 x at</u>
WBGene00021085	<u>W08E12.4</u>	<u>W08E12.4</u>	<u>172545 x at</u>
WBGene00021095	<u>mlt-8</u>	<u>W08F4.6</u>	<u>182327 at</u>
WBGene00021407	<u>Y38C1AB.5</u>	<u>Y38C1AB.5</u>	<u>186604 s at</u>
WBGene00021625	<u>Y47D7A.13</u>	<u>Y47D7A.13</u>	<u>175393 at</u>
WBGene00021709	<u>uqt-29</u>	<u>Y49C4A.8</u>	<u>176819 s at</u>

<u>WBGene00021850</u>	<u>Y54F10AM.6</u>	<u>Y54F10AM.6</u>	<u>176474 at</u>
<u>WBGene00021936</u>	<u>Y55F3BL.2</u>	<u>Y55F3BL.2</u>	<u>186650 at</u>
<u>WBGene00021963</u>	<u>Y57E12B.3</u>	<u>Y57E12B.3</u>	<u>176402 at</u>
<u>WBGene00022024</u>	<u>Y64H9A.2</u>	<u>Y64H9A.2</u>	<u>175115 at</u>
<u>WBGene00022103</u>	<u>cdh-12</u>	<u>Y71D11A.1</u>	<u>176188 at</u>
<u>WBGene00022283</u>	<u>lqc-27</u>	<u>Y74E4A.1</u>	<u>184629 at</u>
<u>WBGene00022287</u>	<u>Y75B7AR.1</u>	<u>Y75B7AR.1</u>	<u>175576 s at</u>
<u>WBGene00022415</u>	<u>Y102A11A.5</u>	<u>Y102A11A.5</u>	<u>176459 at</u>
<u>WBGene00022591</u>	<u>ZC328.1</u>	<u>ZC328.1</u>	<u>180055 at</u>
<u>WBGene00022611</u>	<u>ZC449.1</u>	<u>ZC449.1</u>	<u>183222 at</u>
<u>WBGene00022816</u>	<u>fbn-1</u>	<u>ZK783.1</u>	<u>181745 at</u>
<u>WBGene00077490</u>	<u>M03A1.8</u>	<u>M03A1.8</u>	<u>180375 at</u>

Supplementary Table S3. Gene ontology analysis of genes identified as decreased in *nhr-23* RNAi microarray experiment

Annotation Cluster 1		Enrichment Score: 12.429857987753422						
Category	Term	Count	%	PValue	List Total	Pop Hits	Pop Total	Fold Enrichment
GOTERM_BP_FAT	GO:0018988~molting cycle, protein-based cuticle	25	9.433962	3.61E-13	123	248	7838	6.423748
GOTERM_BP_FAT	GO:0018996~molting cycle, collagen and cuticulin-based cuticle	25	9.433962	3.61E-13	123	248	7838	6.423748
GOTERM_BP_FAT	GO:0042303~molting cycle	25	9.433962	3.94E-13	123	249	7838	6.39795
Annotation Cluster 2		Enrichment Score: 6.379064358969817						
Category	Term	Count	%	PValue	List Total	Pop Hits	Pop Total	Fold Enrichment
SP_PIR_KEYWORDS	cuticle	12	4.528302	5.96E-13	263	35	19674	25.6478
GOTERM_MF_FAT	GO:0042302~structural constituent of cuticle	19	7.169811	2.33E-11	107	155	6686	7.659572
UP_SEQ_FEATURE	region of interest:Triple-helical region IPR008160:Collagen triple helix repeat	10	3.773585	7.79E-11	41	33	3249	24.0133
INTERPRO	IPR002486:Nematode cuticle collagen, N-terminal	18	6.792453	5.40E-10	189	182	13633	7.133961
INTERPRO	disulfide bond	16	6.037736	1.71E-09	189	147	13633	7.851132
SP_PIR_KEYWORDS	collagen	16	6.037736	1.21E-06	263	247	19674	4.845738
SP_PIR_KEYWORDS	collagen	10	3.773585	5.91E-06	263	97	19674	7.711967
GOTERM_BP_FAT	GO:0010171~body morphogenesis	25	9.433962	8.17E-06	123	582	7838	2.737267
PIR_SUPERFAMILY	PIRSF038285:cuticle collagen	8	3.018868	1.56E-05	53	73	4541	9.389506
GOTERM_MF_FAT	GO:0005198~structural molecule activity	21	7.924528	3.62E-05	107	468	6686	2.803858
GOTERM_BP_FAT	GO:0040002~collagen and cuticulin-based cuticle development	9	3.396226	6.74E-05	123	89	7838	6.443957
GOTERM_BP_FAT	GO:0007592~protein-based cuticle development	9	3.396226	7.91E-05	123	91	7838	6.302332
GOTERM_BP_FAT	GO:0042335~cuticle development	9	3.396226	7.91E-05	123	91	7838	6.302332
UP_SEQ_FEATURE	mutagenesis site	4	1.509434	0.356032	41	172	3249	1.842881

Annotation Cluster 3		Enrichment Score: 5.68209004630328						
Category	Term	Count	%	PValue	List Total	Pop Hits	Pop Total	Fold Enrichment
SMART	SM00289:WR1	9	3.396226	1.71E-07	72	50	5537	13.8425
INTERPRO	IPR006150:Cysteine-rich repeat	9	3.396226	3.69E-07	189	50	13633	12.98381
INTERPRO	IPR006149:Nematode-specific EB region	5	1.886792	1.43E-04	189	20	13633	18.03307
Annotation Cluster 4		Enrichment Score: 5.296091128500724						
Category	Term	Count	%	PValue	List Total	Pop Hits	Pop Total	Fold Enrichment
UP_SEQ_FEATURE	signal peptide	21	7.924528	1.39E-08	41	422	3249	3.943417
SP_PIR_KEYWORDS	signal	21	7.924528	1.14E-06	263	424	19674	3.705018
GOTERM_CC_FAT	GO:0005576~extracellular region	16	6.037736	2.11E-05	110	311	7912	3.700438
SP_PIR_KEYWORDS	Secreted	9	3.396226	0.001967	263	169	19674	3.983756
Annotation Cluster 5		Enrichment Score: 5.050007776454602						
Category	Term	Count	%	PValue	List Total	Pop Hits	Pop Total	Fold Enrichment
SMART	SM00473:PAN_AP	6	2.264151	6.68E-06	72	22	5537	20.97348
INTERPRO	IPR003014:PAN-1 domain	6	2.264151	1.03E-05	189	22	13633	19.67244
INTERPRO	IPR003609:Apple-like	6	2.264151	1.03E-05	189	22	13633	19.67244
Annotation Cluster 6		Enrichment Score: 4.501631713985456						
Category	Term	Count	%	PValue	List Total	Pop Hits	Pop Total	Fold Enrichment
GOTERM_BP_FAT	GO:0040014~regulation of multicellular organism growth	22	8.301887	1.37E-06	123	415	7838	3.378117
GOTERM_BP_FAT	GO:0040018~positive regulation of multicellular organism growth	16	6.037736	1.32E-04	123	322	7838	3.166389
GOTERM_BP_FAT	GO:0051240~positive regulation of multicellular organismal process	16	6.037736	1.73E-04	123	330	7838	3.089628
Annotation Cluster 7		Enrichment Score: 4.181221145910459						
Category	Term	Count	%	PValue	List Total	Pop Hits	Pop Total	Fold Enrichment

INTERPRO	IPR003392:Patched	6	2.264151	4.29E-05	189	29	13633	14.92392
INTERPRO	IPR000731:Sterol-sensing 5TM box	6	2.264151	7.04E-05	189	32	13633	13.5248
GOTERM_MF_FAT	GO:0008158~hedgehog receptor activity	6	2.264151	9.47E-05	107	30	6686	12.4972
Annotation Cluster 8		Enrichment Score: 2.1099516696643033						
Category	Term	Count	%	PValue	List Total	Pop Hits	Pop Total	Fold Enrichment
PIR_SUPERFAMILY	PIRSF009400:Peptidase_C46	3	1.132075	0.001874	53	6	4541	42.83962
	IPR001657:Peptidase C46, hedgehog protein	3	1.132075	0.002736	189	6	13633	36.06614
INTERPRO	IPR006141:Intein splicing site	3	1.132075	0.006389	189	9	13633	24.04409
SMART	SM00306:HintN	3	1.132075	0.006826	72	10	5537	23.07083
SMART	SM00305:HintC	3	1.132075	0.006826	72	10	5537	23.07083
INTERPRO	IPR003587:Hedgehog/intein hint, N-terminal	3	1.132075	0.007915	189	10	13633	21.63968
INTERPRO	IPR003586:Hedgehog/intein hint domain, C-terminal	3	1.132075	0.007915	189	10	13633	21.63968
INTERPRO	IPR001767:Peptidase C46, hedgehog protein, hint region	3	1.132075	0.007915	189	10	13633	21.63968
GOTERM_BP_FAT	GO:0030908~protein splicing	3	1.132075	0.008054	123	9	7838	21.24119
GOTERM_BP_FAT	GO:0016539~intein-mediated protein splicing	3	1.132075	0.008054	123	9	7838	21.24119
GOTERM_BP_FAT	GO:0016485~protein processing	3	1.132075	0.031248	123	18	7838	10.6206
GOTERM_BP_FAT	GO:0051604~protein maturation	3	1.132075	0.031248	123	18	7838	10.6206
Annotation Cluster 9		Enrichment Score: 2.046226678500976						
Category	Term	Count	%	PValue	List Total	Pop Hits	Pop Total	Fold Enrichment
GOTERM_BP_FAT	GO:0009791~post-embryonic development	43	16.22642	0.001952	123	1779	7838	1.540255
GOTERM_BP_FAT	GO:0045927~positive regulation of growth	45	16.98113	0.002244	123	1904	7838	1.506072
GOTERM_BP_FAT	GO:0002119~nematode larval development	41	15.4717	0.005348	123	1760	7838	1.48447
GOTERM_BP_FAT	GO:0002164~larval development	41	15.4717	0.005403	123	1761	7838	1.483627
GOTERM_BP_FAT	GO:0040007~growth	23	8.679245	0.464116	123	1364	7838	1.074518

Annotation Cluster 10		Enrichment Score: 2.0405798385132465						
Category	Term	Count	%	PValue	List Total	Pop Hits	Pop Total	Fold Enrichment
GOTERM_BP_FAT	GO:0040008~regulation of growth GO:0009791~post-embryonic	49	18.49057	3.33E-04	123	1967	7838	1.58742
GOTERM_BP_FAT	GO:0045927~positive regulation of development	43	16.22642	0.001952	123	1779	7838	1.540255
GOTERM_BP_FAT	GO:0040010~positive regulation of growth	45	16.98113	0.002244	123	1904	7838	1.506072
GOTERM_BP_FAT	GO:0040009~regulation of growth rate	32	12.07547	0.206675	123	1723	7838	1.183491
GOTERM_BP_FAT	GO:0040009~regulation of growth rate	32	12.07547	0.207674	123	1724	7838	1.182804