

Additional file 1:

Selected genes for pilot in situ screen. ANGU numbers according to EST-IDs from *M. lignano* EST project (<http://macest.biology.ucla.edu/macest/>)

1. ANGU570 membrane-type frizzled related protein; Receptors
2. ANGU781 chromosome/nuclear structure Histone H3, family 3a
3. ANGU879 protein phosphatases Atg05580
4. ANGU919 RNA binding ELAV-like 1
5. ANGU1007 ribosomal components 40S ribosomal protein S3
6. ANGU1040 translation elongation factor 1alpha
7. ANGU1103 microtubules beta tubulin
8. ANGU1138 Transcription factor Wolf-hirschhorn syndrome candidate 1
9. ANGU1141 apoptosis TSARG2
10. ANGU1217 bicaudal
11. ANGU1293 HSP70
12. ANGU1314 TOL-1/takeout
13. ANGU1679 GABA
14. ANGU1698 protein phosphatases Ser/Thr 2A
15. ANGU1731 microtubules eml2 protein
16. ANGU1740 chaperonin
17. ANGU1810 microtubules tub-1
18. ANGU1835 RNA binding Ribonuclear protein 97D
19. ANGU1858 8-hydroxy-guanine glycosylase DNA repair
20. ANGU1901 hormone/GF/temptin
21. ANGU1907 Transcription factor zink protein 600
22. ANGU1911 translational elongation factor 1alpha
23. ANGU1931 post-translational modification
24. ANGU1938 RNA processing similar to DEAD
25. ANGU1972 endoctic receptor Endo180
26. ANGU2050 SFRP-2
27. ANGU2138 cyclophilin
28. ANGU2156 ras-like
29. ANGU2157 hormone/GF takeout
30. ANGU2260 protein kinase B - raf
31. ANGU2261 Transcription factor zink finger protein
32. ANGU2295 STAT2
33. ANGU2378 protein kinase adenylate kinase isoenzyme-2
34. ANGU2434 Golgi unknown
35. ANGU2700 Tetraspanin 66E; Adhesion
36. ANGU2717 Transcription factor ETS DNA binding protein Yan
37. ANGU2734 Transcription factor Fank-1
38. ANGU2738 peptidylprolyl isomerase; Post-Translational Modification
39. ANGU2747 similar to armadillo-repeat containing...
40. ANGU2750 Receptors CG2839
41. ANGU2757 stress response: alcohol dehydrogenase class III
42. ANGU2804 translation factor novel protein similar to...
43. ANGU2833 Thick/thin filaments A60607 tropomyosin-fluke
44. ANGU2876 cyclin B1
45. ANGU2876 cyclin B1
46. ANGU2887 translation elongation factor EF1gamma
47. ANGU2903 microfilaments cofilin like protein
48. ANGU2904 transcription factor similar to SOH1

49.	ANGU2936	membrane protein, induced TNF factor
50.	ANGU3044	xolloid
51.	ANGU3103	arginine kinase
52.	ANGU3143	transcription factor FLJ40321 protein
53.	ANGU3164	vertebrates RIKEN cDNA
54.	ANGU3215	degradation cathepsin L-like cysteine proteinase A
55.	ANGU3256	vasa
56.	ANGU3332	protein kinase casein kinase 2 beta
57.	ANGU3379	transcription factor TAR
58.	ANGU3391	caspase-3
59.	ANGU3415	transcription factor KOW
60.	ANGU3466	membrane protein SCO-spondin
61.	ANGU3467	receptor growth hormone inducible transmembrane protein
62.	ANGU3482	cell cycle division nuclear distribution gene
63.	ANGU3546	translation factor elongation 4e
64.	ANGU3569	lamin
65.	ANGU3685	transducktion RACK G protein
66.	ANGU3769	transcription factor spacial delta
67.	ANGU3791	receptor GABA-BR1b
68.	ANGU3815	protein kinase CK2alpha SU
69.	ANGU3912	transcription factor FOXj3 protein
70.	ANGU3957	immunology preS1 binding protein
71.	ANGU4026	XWnt11
72.	ANGU4196	boule; RNA-binding protein
73.	ANGU4210	transcription factor Rec
74.	ANGU4277	DNA supercoiling-factor
75.	ANGU4381	ERK5
76.	ANGU4510	groucho
77.	ANGU4525	receptor TLR3
78.	ANGU4574	receptor nicotinic acetylcholine receptor
79.	ANGU4714	SIR2-like histone deacetylase
80.	ANGU5083	Xolloid
81.	ANGU5174	DNA-Topoisomerase
82.	ANGU5290	cell cycle division pescadilla homolog1
83.	ANGU5302	ribosomal components 60S
84.	ANGU5468	cell cycle division polo like kinase 4
85.	ANGU5731	stress response heat shock protein 60
86.	ANGU5871	insulin-like growth factor receptor
87.	ANGU5879	protein phosphatases Ser/Thr protein phosphatases
88.	ANGU5895	Smad4
89.	ANGU5903	transcription factor CCR4
90.	ANGU6039	transcription factor zink finger protein 403
91.	ANGU6051	cdc2
92.	ANGU6098	transcription factor paired
93.	ANGU6130	Notch receptor protein
94.	ANGU6303	programmed cell death 6-interacting protein
95.	ANGU6519	transcription factor zinc finger PDZ5
96.	ANGU6547	transcription factor BTF3
97.	ANGU7183	tropomyosin 2
98.	ANGU7189	transcription factor EGF-response factor 2
99.	ANGU7606	piwi
100.	PCR	actin
101.	PCR	MCM2